THE STATUS OF TELECOMMUNICATIONS COMPETITION IN CALIFORNIA

Third Report
For the Year 2003

Submitted to the California State Legislature
in Compliance with Section 316.5
of the California Public Utilities Code

CALIFORNIA PUBLIC UTILITIES COMMISSION

Respectfully submitted
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The Status of Telecommunications Competition in California 3rd Report

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Third Report
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Chapter 1. Executive Summary

This is the Third Report on the Status of Telecommunications Competition in California. As in the case of the prior two reports in the series, it focuses on the California marketplace with some comparisons to national trends. Staff from the California Public Utilities Commission's (CPUC's or Commission's) Telecommunications Division prepared this report in response to Section 316.5 of the California Public Utilities Code. Section 316.5 requires that the CPUC report annually on the status of competition in the telecommunications marketplace, significant changes that have occurred in the previous year, and statutes that should be amended, repealed, or enacted to promote competition. This is the last report to be issued since Section 316.5 terminates at the end of this year.

Chapter 2 provides a contextual overview, including the mandate, for the report. Key findings from wireline, wireless, and broadband market analyses are summarized below and discussed in detail in Chapter 3. Significant regulatory issues impacting telecommunications in California are also summarized below. These issues are addressed and evaluated in Chapter 4.

1.1 Key Findings in Wireline Voice Markets

Wireline voice markets consists of local, local toll, and long-distance telecommunications services delivered by incumbents (ILECs), competitors (CLECs), and inter-exchange/long distance carriers (IECs). These markets were evaluated in terms of relative market share and growth trends. The analysis emphasizes the level of activity experienced by incumbent versus competitor carriers as well as residential versus business market segments. In addition to revenues, wireline market share was determined on the basis of carrier-reported access lines, which are owned or leased in order to provide telecommunications service to customers within California.[1]

Within each sector, market share was evaluated in terms of carrier access lines and revenues as of December 31, 2002. In some specific instances, revenues earned through March 2003 were used in the evaluation. The analysis is based on data responses of 143 (22 ILECs and 121 CLEC/IECs) of 274 wireline carriers registered to do business in California. Staff found that ILECs continue to control the local wireline market in California, although CLECs are gaining ground in the local toll market. SBC continues to lead the local and local toll marketplaces, earning more than all CLECs combined. Key findings follow.

[1] Access lines were categorized as: residential, business, other, and total. For more detailed definitions see Appendix B.

Local Market[2]

- ✓ ILECs control a 94% market share of the statewide local residential market as measured by access line data, down from the 94.8% share previously reported in the Second Competition Report.
- ✓ For California's local business markets, ILECs hold 84.7% of the access lines, up from the 83.5% share previously reported in the Second Competition Report.
- ✓ The ILECs' customer base (as measured by access lines) is 63% residential and 37% business, as compared to CLECs' 37% and 63%, respectively.
- ✓ As measured by access lines, the top two companies in California's local residential and business markets are SBC and Verizon, both ILECs.
- ✓ In order from largest to smallest, the top 3 competitors in California's local residential market based on access lines are: AT&T, Cox Communications and WorldCom.
- ✓ The top 3 California local business market competitors based on access lines are: PacWest, Allegiance and AT&T (in order from largest to smallest).
- ✓ In terms of revenues, ILECs still hold a large share of the residential and business markets, with 78% of total revenues in California.

Local Toll Market[3]

- ✓ An estimated $1.82 billion in annual revenues was earned from local toll service in California.
- ✓ ILECs earned 48% of these revenues, down from 66% share of revenues reported in the Second Competition Report.
- ✓ CLECs'/IECs' share of local toll revenues was 52%.
- ✓ CLECs/IECs earned 57.6% of the business local toll revenues and approximately 47.2% of the residential local toll revenues.
- ✓ The top 3 residential local toll service providers in California are: SBC, WorldCom and AT&T (in order from largest to smallest).
- ✓ The top 3 business local toll service providers in California are also SBC, WorldCom and AT&T (in order from largest to smallest).
- ✓ SBC alone earned about 40% of all local toll revenues.

Long Distance Market[4]

- ✓ An estimated $1.602 billion in annual revenues was earned in California's long distance market.
- ✓ Residential long distance services generated 52% of these revenues.
- ✓ At the end of March 2003, three months after receiving authority to enter the long distance market in California, SBC had captured a 1.2% share of the total market and a 9% share of the ILEC share of the market.
- ✓ Market share in California's long distance market is concentrated among a few carriers.
- ✓ The top 3 residential market long distance providers in California, earning 85.7% of revenues, are AT&T, WorldCom and Verizon (in order from largest to smallest).
- ✓ The top 3 business market long distance providers in California, earning 88.9% of revenues, are AT&T, WorldCom and Sprint (in order from largest to smallest).

SBC's and Verizon's UNE Prices

- ✓ The Commission is in the process of revising the prices CLECs pay to lease UNEs from ILECs.

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[2] Unless otherwise indicated, these key findings are based on December 2002 access line or annual revenue data.
[3] Ibid.
[4] Ibid.

- ✓ Recent UNE Platform (UNE-P) price reductions made by SBC and Verizon have already spurred UNE-P leasing volumes in the state and are changing the way CLECs enter the local telephone service market.

1.2 Key Findings in Wireless Voice Market

The CPUC's analysis of California's wireless industry indicates continued growth based on revenues. There appears to be competition among five core wireless companies. The analysis is based on data request responses from 15 wireless companies registered in California, consisting of the five leading companies and 10 of the smaller companies. Key wireless market findings are summarized below.

- ✓ Between January 2002 and March 2003, there has been an estimated 15.8% increase in the number of California wireless customers.
- ✓ The California wireless market remains concentrated among five large companies, listed in alphabetical order: AT&T Wireless, Cingular Wireless, Nextel, Sprint PCS, and Verizon Wireless.
- ✓ The market share distribution in terms of customers among the top five carriers has remained relatively stable through 2002 and into early 2003.
- ✓ The customer base and revenues of the surveyed group of 10 smaller carriers experienced tremendous growth through 2002 and into early 2003.
- ✓ As a group, the smaller surveyed carriers' customer base rose 519% from year-end 2001 to year-end 2002, and another 28% during the first three months of 2003.
- ✓ The combined revenues of the top five wireless carriers increased 9.5% from year end 2001 to year end 2002, and only an estimated 2.8% from 2002 to 2003. By contrast, the revenues of the remaining 10 carriers surveyed rose 4.5% from year end 2001 to year end 2002, and an estimated 36.6% from 2002 to 2003.[5]

1.3 Key Findings in Broadband Markets

Eighteen DSL providers in California responded to the CPUC data request with data indicating that they are still active in the market serving customers directly or through an affiliate. Cable companies were not surveyed this year because their survey response rate was so low when they were last surveyed for the previous report. Rather, FCC data was selected to provide a picture of the cable modem industry in California as compared to the nation. Key findings are summarized below.

DSL Market

- ✓ Between December 2000 and March 2003, the number of DSL lines in California tripled. This growth represented a nearly 230% increase in ILEC DSL lines but a less than 50% increase in CLEC DSL lines.
- ✓ The data indicates, however, that the DSL market lacks robust competition.
- ✓ Between December 2000 and March 2003, the CLECs' share of the DSL market dropped from 16% to 8%. Over the same period, the ILECs' share grew from 84% to 92%.
- ✓ Between December 2000 and March 2003, the combined DSL market share of SBC's and Verizon's affiliates grew from 83% to 91%.

[5] It was necessary to annualize only three months of 2003 revenue data from both the "top five" carrier group and the smaller carrier group in order to make these two statements. It is assumed that inaccuracies inherent in making such projections should be similar for both groups, and thus of little effect for the purpose of drawing comparative conclusions.

- ✓ The DSL market share of small ILECs (those ILECs other than SBC's and Verizon's affiliates) remained unchanged at 1% at the end of the 27-month period.

DSL, Cable Modem and Other Broadband Markets Compared[6]

- ✓ For the most part, the broadband market is served by DSL and cable modem technology. Other available broadband technologies are satellite, fixed wireless, WiFi, fiber-to-the-home and broadband-over-power-line.
- ✓ Between June 2000 and December 2002, there was a 334% increase in broadband subscribership in California.
- ✓ Nationwide, broadband subscribership increased nearly 4-½ fold between June 2000 and December 2002.
- ✓ Both in California and throughout the U.S., the market share of broadband technologies other than DSL and cable modem has been dwindling in the face of a growing DSL/cable modem duopoly.
- ✓ As of December 2002, DSL had a 49% market share and cable modem had a 39% market share in California.
- ✓ Nationwide as of December 2002, DSL had a 34% market share and cable modem had a 59% market share.

1.4 Key Regulatory Issues Impacting Telecommunications

Chapter 4 of the report discusses key regulatory issues impacting the competitive telecommunications landscape in California. These issues, summarized below, include economic concerns such as long distance market entry and issues related to the sufficiency of consumer information, service quality, and choice.

Issues Discussed in the Third Report

- ✓ *SBC commences long-distance service in California.* By D.02-09-050 issued in September 2002, the Commission determined that the FCC should authorize SBC's entry into the long distance market in California. In late December 2002 the FCC authorized SBC to commence long distance service in the state, and the ILEC entered the market shortly thereafter. In addition to supporting SBC's market entry through D.02-09-050, the Commission also decided that an expedited dispute resolution (EDR) process should be developed and used by SBC and CLECs to resolve competitors' local network problems, directed SBC to submit a report to the Commission on the feasibility of structurally separating its local operations into wholesale and retail entities, and raised the possibility of starting a proceeding to select and appoint a competitively neutral third-party Preferred Interexchange Carrier (PIC) administrator for California to replace SBC. Today, the EDR process is in operation and the Commission is closely monitoring the impact of SBC's market entry while it continues to consider the PIC and structural separation issues.

- ✓ *SBC's Performance Incentive Plan assures CLECs receive the same service as other SBC customers.* In March 2002, the Commission established a plan to discourage SBC from providing inadequate service to CLECs that need access to the SBC network to provide service to their own customers. The plan requires SBC to make payments if performance deteriorates below established standards. There is currently a collaborative effort

[6] Data source: FCC Reports "High-Speed Services for Internet Access, Status as of …"June 30, 2000, December 31, 2000, June 30, 2001, December 31, 2001, June 30, 2002 and December 31, 2002."

underway by SBC and CLECs to update the plan to include needed new measures of performance.

- ✓ *Local number portability is of growing importance to wireless market competitors, such that its absence may present a barrier to competition.* Consumers may be deterred from switching to new service providers if switching requires them to assume new phone numbers. Congress, the FCC, and the CPUC addressed this problem by requiring most wireline phone companies to allow customers to switch between phone service providers while retaining their original phone number, known as number porting.[7] Number porting activity has been holding steady through the first quarter of this year. Implementation of number porting in the wireless market is presently scheduled to commence in November of this year.

- ✓ *California Telecommunications Consumer Bill of Rights is being implemented to protect consumers and open communication between carriers.* A report by the CPUC Telecommunications Division found that consumers and ultimately the competitive market would benefit from clearer rules for wireless and wireline carriers, a review of tariffs and consumer protection policies, and a review of carriers' limited liability language. Since September 2000, the Commission has held many public participation hearings and industry workshops on these subjects, garnering substantial input from consumers and carriers on the nature of these new rules. In July 2003 the Commission issued a draft of the new rules, and conducted "Consumer Bill of Rights Compliance Workshops" for all telecommunications carriers in anticipation of finalizing the rules in the fall.

- ✓ *Quality of service control measures are being considered in response to increasing consumer complaints.* In December 2002, the Commission opened a proceeding to revise the ten-year old standards it has been using to judge telecommunications service quality. The action was necessitated because of the evolution of telecommunications technology and changed business conditions. This proceeding will establish rules for all carriers providing retail telecommunications products or services to end users in California, including DSL and wireless providers.

- ✓ *A new federal broadband loan program for rural areas is being developed.* In mid-2003, the U.S. Department of Agriculture and the FCC launched a joint initiative aimed at providing loans and loan guarantees to rural communities for broadband systems development. The initiative focuses on providing broadband access through a wireless solution.

- ✓ *Federal and state regulators are focusing on broadband.* Proceedings are underway to clarify the appropriate legal and regulatory frameworks applicable to broadband services. Outcomes of these proceedings will have significant impact on the maturation of the broadband marketplace.

- ✓ *The FCC's Triennial Review of UNE rules is completed.* This year the FCC ruled that ILECs will no longer be required to make certain types of UNEs available to CLECs, nor to offer voice/DSL line sharing. The Commission has initiated a proceeding in this matter, and is considering an appeal of the line sharing aspect of the ruling.

- ✓ *The Commission is conducting its fourth Triennial Review of the New Regulatory Framework (NRF).* The Commission commenced this NRF review for SBC and Verizon in September

[7] Section 251(b)(2) of the 1934 Communications Act as amended by the 1996 Telecommunications Act, and First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 83252, Paragraph 165.

2001. Hearings on regulatory issues raised through audits of the two firms' operations were conducted in June 2002, and further hearings on SBC's and Verizon's service quality under the NRF were subsequently held in August. Over the last six months, the Commission has released various draft decisions with different findings and conclusions on audit and service quality issues. Once the Commission votes on these draft decisions and resolves these issues, the last phase of this NRF review will focus on implementing any needed operational and service quality related changes for the ILECs.

- ✓ *The Commission is developing a plan for widespread use of advanced communications in California.* Last year the Legislature passed SB 1563, which amended the telecommunications policy goals in the Public Utilities Code to focus more on providing access to advanced telecommunications services for the state's educational, health and government institutions, and for the state's rural, inner city, low income and disabled citizens. The Commission opened a rulemaking proceeding in April as the first step in developing its plan to promote these new policy goals. The plan will be submitted to the Legislature by the end of 2004.

Chapter 2. Introduction and Background

This chapter describes the framework for this Third Report on the Status of Telecommunications Competition in California. An overview of the report methodology and telecommunications industry contextual information follows, including the mandate for this report, the markets studied, the types of telecommunications competitors, the market structure that has arisen from state and federal regulatory actions, and the customer segments that were studied.

2.1 Purpose of Report

Section 316.5 of the California Public Utilities Code mandates that the California Public Utilities Commission (CPUC or Commission) annually submit a report on the status of competition and deregulation in the telecommunications industry to the State Legislature. The reporting requirement is effective until January 1, 2004.[8] Staff of the CPUC's Telecommunications Division prepared the report on behalf of the Commission.

Section 316.5 requires that the CPUC's report on telecommunications competition review the following:

a) The status of competition in the telecommunications marketplace;

b) Significant changes that have occurred in the telecommunications marketplace in the previous year;

c) Any statutes that might impede or discourage competition in, or deregulation of, the telecommunications marketplace; and

d) Recommendations to the Legislature on statutes that should be amended, repealed, or enacted to enhance and reflect the competitive telecommunications environment, and/or promote the orderly deregulation of the telecommunications industry.

2.2 Markets Studied

To assess the status of telecommunications competition in the State of California, CPUC staff surveyed companies that are registered in California to provide one or more of the following services:

- Wireline Voice Communications (local, local toll, and long distance)
- Wireless Voice Communications
- DSL Broadband Communications

CPUC data requests were sent to 274 wireline carriers registered to provide service in California, to which 59% (including 143 voice and 18 DSL service providers) responded. Data requests were sent to 15 wireless carriers to which 100% responded. Carriers were asked questions about their revenues, number of customers, and access lines. In addition to data responses, staff relied upon nationally available data to develop estimates of incumbent and competitor market shares. For example, cable modem companies were not surveyed for

[8] Thus, this third report will be the last in the series.

this report and, consequentially, supplemental national data was relied upon to obtain a view of broadband competition in California as compared to the nation at large.

2.3 Telecommunications Competitors

Companies may provide service over copper wire, coaxial cable, fiber optic cable, or wireless infrastructure. Wireline voice markets consist of local, local toll and long distance services provided over wireline infrastructure by ILECs, CLECs and IECs to residential and business consumers in California. Wireless voice markets are served by wireless companies. Broadband markets are served by broadband data service providers which may be wireline providers (DLECs), wireless providers, or cable providers. Each of these competitor types and the markets they serve are discussed below.

Wireline Telecommunications Competitors

ILECs (Incumbent Local Exchange Carriers) – ILECs are the traditional wireline telecommunications carriers operating in defined geographic areas. Prior to 1996, for local service (and prior to 1995 for local toll service), ILECs operated as monopolies having the exclusive right and responsibility for providing local and local toll telephone service in defined geographic areas.[9] Currently, two large ILECs (SBC and Verizon,) two mid-sized ILECs (Citizens and Roseville,) and eighteen small ILECs operate in California. Also, some ILECs have affiliates that offer long distance, wireless and/or broadband services.

CLECs (Competitive Local Exchange Carriers) – CLECs are wireline carriers authorized under state and federal regulations to compete with ILECs to provide local telephone service. They often package their local service offerings with local toll, long distance, international, Internet access, cable and/or video services. Under policies adopted by the CPUC, the Federal Communications Commission (FCC) and the Telecommunications Act of 1996 (TA '96), CLECs can choose which types of customers to serve (business, residential or both) and what services to offer. CLECs provide telephone services in one of three ways or a combination thereof:

a) by building or rebuilding telecommunications facilities[10];
b) through the purchase of telecommunications services from another carrier (typically an ILEC) at wholesale rates and, then, reselling those services to their own customers at retail rates[11]; and
c) by leasing parts of the ILEC network referred to as "unbundled network elements" (UNEs).

Some larger CLECs operating in California are AT&T, Pac-West Telecommunications Inc., and Cox California Telecom, LLC. Some ILECs have also been given authority to become CLECs outside their original service territories.

[9] The Telecommunications Act of 1996 allows the FCC to deem other carriers as incumbents if they occupy a position in the market that is comparable to an ILEC, have substantially replaced the ILEC in the market, or if such treatment is in the public interest. To date, the FCC has not deemed any carriers as comparable to ILECs in California.

[10] These "facilities-based" CLECs build the network they need to serve customers including the portion of the network (i.e. the local loop) that connects to the customer's premise.

[11] At one time, the use of "resale" by CLECs was thought of as a transitional market entry strategy while the CLECs were building their networks over a period of time.

In California, SBC and Verizon each have authority to operate as CLECs in each other's service areas.[12]

IECs (Inter-Exchange Carriers) – IECs are typically defined as wireline "long distance" carriers. IECs may provide long distance services to customers using their own facilities or by reselling long distance services they have purchased from another carrier to their customers. Some IECs also offer local and local toll telecommunications services in addition to international, Internet access, cable and/or video services. Other IECs are affiliates of ILECs. The largest of these is SBC, the California ILEC authorized to offer long distance service in California last year. Some other IECs operating in California are AT&T, Sprint Communications LLP (Sprint), WorldCom, Verizon Long Distance, Roseville Long Distance, Sierra Telephone Long Distance, and Working Assets. IECs are often registered as CLECs.

Wireless and Broadband Communications Competitors:

DLECs (Data Local Exchange Carriers) – The TA '96 encourages the deployment of advanced telecommunications capability. DLECs are those carriers that deliver high-speed data transmission service (broadband) but not voice service. Typically, DLECs deliver services such as high-speed access to the Internet. ILECs and CLECs may have DLEC functions or subsidiaries. DLECs operational in California include Covad Communications Company and SBC's data affiliate Advanced Solutions Inc. (ASI).

Cable Companies – Cable providers offer a variety of voice and data services to customers over a network that uses coaxial cable instead of copper wires. Despite the technical differences, cable providers with suitably upgraded networks can directly compete with ILECs in the provision of voice and data services. Residential customers are a particular market segment targeted by cable providers because cable video services already go to many homes across the nation. Cable providers such as Cox Communications, Comcast, and Cablevision offer residential telephone and data services in a number of U.S. markets.

Wireless Companies – Wireless companies may provide voice and/or broadband services. Wireless broadband services are delivered using fixed wireless or satellite technology. It is estimated that both have limited deployment levels to date in California. Fixed wireless technology, which relies on antenna towers to send and receive data, can offer services to large geographic areas with a modest investment. Since only limited new infrastructure is required, fixed wireless is particularly attractive in rural areas, smaller towns, and suburbs. Sprint Broadband Direct is an example of a fixed wireless provider serving a limited number of customers in certain select areas in California. Satellite technology is another option for rural areas but the costs are substantial. There is also a growing movement of wireless Internet use from remote locations such as cafes and community hubs through the use of Wireless Fidelity (or WiFi), which requires a PC card that works with a wireless hub connected to users through the unlicensed wireless spectrum to deliver high speed Internet access to users. End-users subscribe with wireless Internet service providers such as Surf-n-Sip and T-Mobile Hotspot to access these wireless hubs.

[12] Presently, Verizon is not providing service as a CLEC in California even though it is authorized to do so.

As the telecommunications marketplace evolves, delineation between local, local toll, and long distance services are becoming less distinct. For example, some carriers have packaged local toll and long distance services together. Some carrier calling plans offer a flat per-minute-of-use charge for both local toll and long distance calls.[13] Other plans offer a flat monthly rate for local toll and long distance service that covers a maximum number of minutes of use.[14] In some cases, therefore, the focus is switching away from the geographic delineations of LATAs and switching toward a minutes of use pricing basis.

2.4 Customer Segments

Residential and business services are regulated and marketed differently. In California, residential and business customers pay different rates for local service. There are also distinct policies and residential consumer protections in place that do not apply to business customers. For instance, subsidy programs such as Universal Lifeline Telephone Service assure residential customers access to basic telecommunications service, but the program is not available to business customers. As the telecommunications marketplace opened to competition, new competitors focused on specific customer classes and service types. Many competitors do not provide the same range of services as ILECs. Where possible, this Third Report on Telecommunications Competition in California looks at market share in terms of residential versus business customers within the wireline and wireless market sectors.

[13] *Long Distance Rates Survey 2001*, Consumer Action News.
[14] Ibid.

Chapter 3. Telecommunications Competition

Chapter 3 evaluates competition levels in California's voice and broadband communications markets. Voice markets encompass: (1) wireline services within local, local toll, and long-distance market segments, and (2) wireless services. Broadband markets encompass: (1) Digital Subscriber Line service, and (2) Cable Modem service and other emerging broadband technologies.

Services and technologies that are still in a developmental or early deployment stage, such as Broadband Over Power Line, satellite, fixed wireless, WiFi and Fiber-to-the-Home, are also discussed. These services and technologies are apt to grow, but are not yet used by a significant portion of the population.

Within the core voice and broadband communications market sectors, market share is evaluated in terms of residential and business activity, and further in terms of customers or access lines and revenues earned. Where possible based on data availability, historical trends are presented. There is substantial emphasis on the comparison between competitor and incumbent market activity.[15]

3.1 Voice Communications - Wireline Services

The wireline market consists of local, local toll, and long-distance telecommunications services delivered by incumbents (ILECs), competitors (CLECs), and inter-exchange/long distance carriers (IECs).[16] Within these sectors, market share was generally evaluated in terms of carrier access lines[17] and carrier revenues as of December 31, 2002. In a few specific instances, the analysis period extended through March 2003.

Data was derived from 143 of 274 carriers that responded to a request for data conducted for the purposes of this wireline analysis (22 ILECs, 121 CLEC/IECs).[18] [19] A list of the carriers that responded can be found in Appendix A.

[15] Large versus small carrier activity was evaluated for the wireless market, which does not function in terms of ILEC/CLEC designations from a regulatory perspective.

[16] CLECs and IECs cannot be separated because carriers register to do business in local and/or long-distance markets, which may reflect future plans if not current practices. Therefore, "CLEC/IEC" may be used synonymously with CLEC when referring to competitors.

[17] Access lines include residential, business, other, and total. For more detailed definitions see Appendix B.

[18] Although 274 wireline carriers are registered with the CPUC to do business in the State, not all registered carriers are actually doing business.

[19] WorldCom, a significant carrier in the California market, provided only aggregate revenue data as its data response. Repeated TD staff attempts to obtain the revenue detail needed was unsuccessful. Thus, in order to perform the analysis that follows, staff reviewed WorldCom's data response for the CPUC's prior (Second) Competition Report and applied the same ratios to the revenue data provided for the current report.

3.1.1 ILECs Continue to Hold Dominent Share of Local Wireline Market

Based on December 31, 2002 access line data, ILECs control 94% of the local residential market in California. (See Figure 3.1a) The ILEC share of the local residential market is held primarily by SBC with a 78% share, followed by Verizon with a 20% share. All other ILECs hold a 2% share of the California local residential market. (See Figure 3.1b) At 6%, the CLEC market share has improved modestly from the 5.2% share reported in response to an earlier data request, while the current ILEC market share is slightly lower than the 94.8% previously reported. [20]

Figure 3.1a

Residential Access Line Market Share

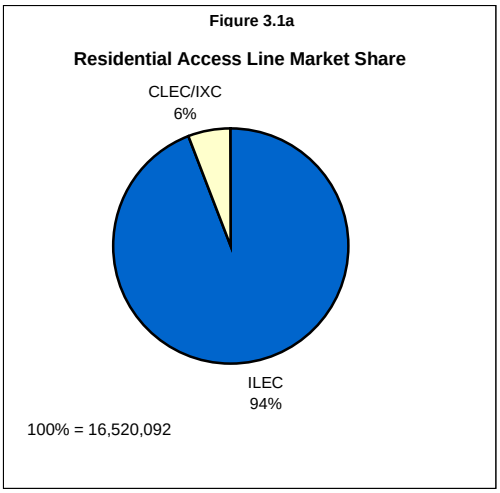
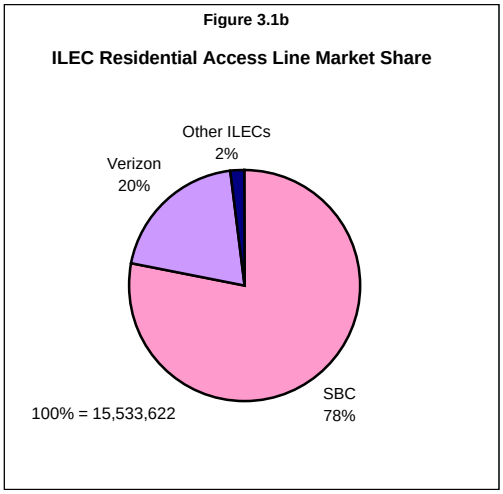


Figure 3.1b

ILEC Residential Access Line Market Share



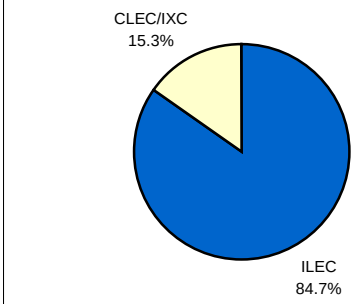
Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003.

The California local business market continues to be more competitive than the local residential market with CLECs and IXCs serving 15.3% and ILECs serving 84.7% of the market. (See Figure 3.2a) Of the ILEC total, SBC serves approximately 83% of the market, while Verizon's share is 15.9%. The combined market share for all other ILECs is one percent. (See Figure 3.2b) ILECs have made modest gains in capturing business customers. Previous data had indicated ILECs having 83.5% and CLEC/IXC having 16.5% market shares.[21]

[20] Second Competition Report, p.13
[21] ibid.

Figure 3.2a

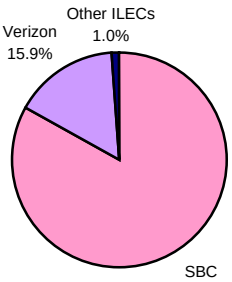
Business Access Line Market Share



100% = 10,884,539

Figure 3.2b

ILEC Business Access Line Market Share



100% = 9,221,919

Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003.

SBC and Verizon continue to be the predominate providers of local telecommunications services in California. The next three largest local service competitors, in rank order, are AT&T, Cox and WorldCom for the local residential market and Pac West, Allegiance and AT&T for the local business market. (See Figure 3.3)

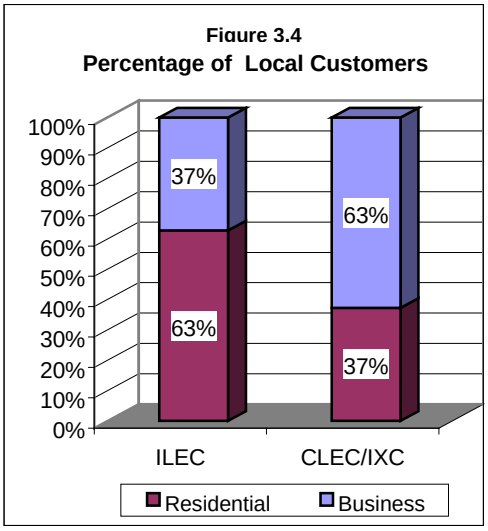
Figure 3.3
Top Three Local Exchange Competitors
(Based on Access Line Data)

CLEC Rankings	Local Residential Market	Local Business Market
1st	AT&T	Pac West
2nd	Cox	Allegiance
3rd	WorldCom	AT&T

Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003

As measured by access lines, the local customer base of California ILECs is 63% residential and 37% business customers. The ILEC distribution of customers has not changed from previously reported data but the CLEC/IXC customer base has shifted. As of December 31, 2002, competitive carriers have a 37% residential and 63% business local customer base. (See Figure 3.4) Previously reported data had shown CLEC/IXC customers being 32% residential and 68% business, proportionately, more residential customers and fewer business customers.[22]

[22] "Second Competition Report" p.14.



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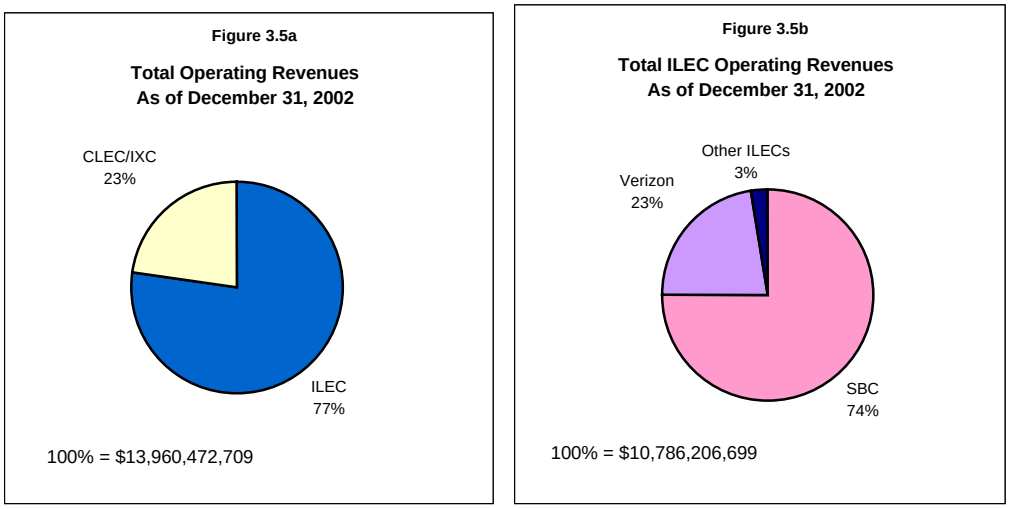
Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003

3.1.2 ILECs Reap Largest Share of Wireline Operating Revenue

Measured in terms of total operating revenues, the size of the California wireline telecommunications market was $14 billion on December 31, 2002. ILECs serve 77% and CLECs/IXCs serve 23% of the market. (See Figure 3.5a.) Of total ILEC share of operating revenues, SBC earned 74%, while Verizon earned 23%. All other ILECs combined earned 3% of total ILEC operating revenues.
(See Figure 3.5b.)



Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003

ILECs earned $4.4 billion of total local residential revenues in California and $2.5 billion of local business revenues equating to 75.6% of local residential and 90.4% of local business market shares.

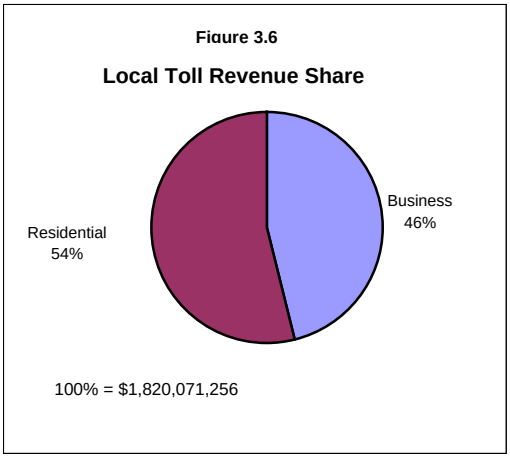
3.1.3 ILECs Continue to Control Majority Share of Local Toll Market

Local toll calls are calls made within a single Local Access and Transport Area (LATA) to a party located outside the calling party's local (flat rate) calling area. Total local toll revenues were reported to be $1.82 billion as of December 31, 2002, with 54% being derived from the provision of residential services and 46% from the provision of business services. (See Figure 3.6.)

As of December 31, 2002, California residential and business local toll revenues amounted to $982,438,631 and $837,637,624, respectively. With 47.2% of residential local toll revenues and 57.6% of business local toll revenues, the CLEC/IXCs have a one-half share of the local toll market. In comparison, the ILECs residential and business local toll market shares amounted to 52.8% and 42.4%, respectively.

Figure 3.6

Local Toll Revenue Share



Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003

In rank order, the top three providers of local toll services in California as of December 31, 2002 were SBC, WorldCom and AT&T. These three carriers control 69.7% of the residential toll market. (See Figure 3.7.) These three carriers also control a total of 83% of the California business local toll market.

Figure 3.7
Top Local Toll Companies
As of December 31, 2002

Ranking	Residential Market	Business Market
1st	SBC	SBC
2nd	WorldCom	WorldCom
3rd	AT&T	AT&T

Data as of December 31, 2003

Previous local toll revenue data for the period January 2001 though June 2002 had indicated the ILECs' and competitors' shares of the California local toll market to be 66% and 34%, respectively.[23] Current data indicates that the ILEC share of local toll revenues fell to 48% as

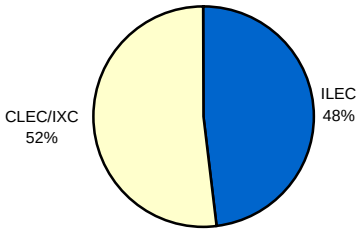
[23] "Second Competition Report" p.15.

of December 31, 2002 and remained at 48% three months later on March 31, 2003. (See Figures 3.8a and 3.9a.)

SBC Long Distance, an affiliate of the SBC ILEC, launched its local toll operations in 2003. Although three months of data is too short a period to draw defensible conclusions, one assessment of the impact of SBC Long Distance market entry shows that the distribution of ILEC market shares didn't change from December 31, 2002 to March 31, 2003. As a point of interest, total market shares also remained unchanged between these two dates. At both points, SBC served 83% of the ILEC share, while Verizon served 15%. The combined market share for all other ILECs remained at 2%. (See Figures 3.8b and 3.9b)

Figure 3.8a

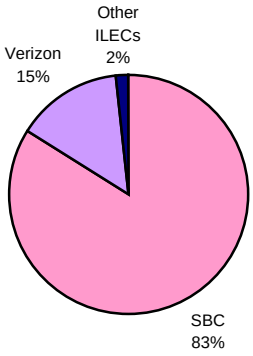
Local Toll Revenue Share as of December 2002



100% = $1,820,071,256

Figure 3.8b

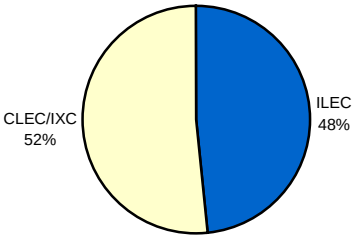
ILEC Local Toll Revenue Share as of December 2002



100% = $874,315,502

Figure 3.9a

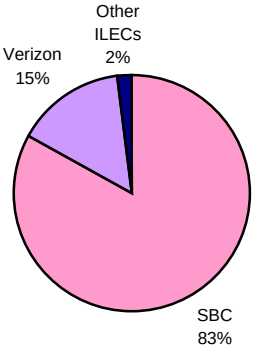
Local Toll Revenue Share As of March 31, 2003



100% = $409,328,623

Figure 3.9b

ILEC Local Toll Revenue Share As of March 31, 2003



100% = $198,346,174

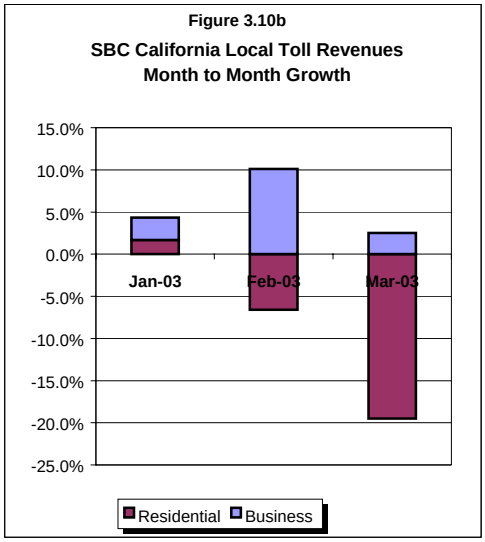
Source: Responses to CPUC Wireline Data Request sent April 2003

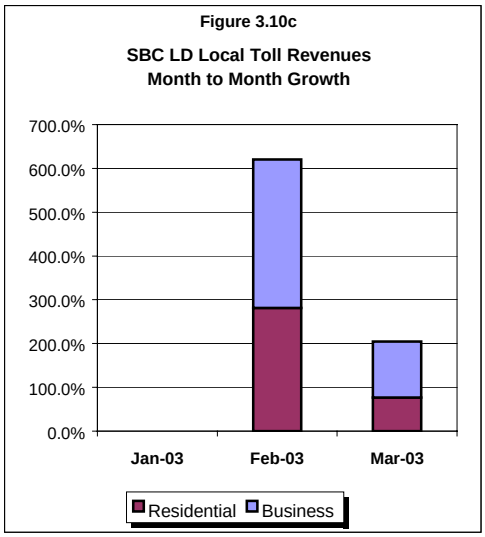
Within the SBC local toll market share, revenues shifted to some extent from SBC California to SBC Long Distance. The biggest shift occurred February-March 2003 with SBC California's residential local toll revenues dropping 19% and SBC Long Distance's rising 13%. Projecting this snapshot of data outward suggests that a significant shift in market share and toll revenues may occur within the SBC organization. A regulatory response

would be indicated to the extent the more traditionally regulated SBC California's toll revenues are depressed and to the extent SBC Long Distance's revenues are treated separately.[24]

Figure 3.10a
Local Toll Revenue
First Quarter 2003 Monthly Growth Rates

	January	February	March
SBC California			
• Residential	2%	-7%	-19%
• Business	3%	10%	3%
SBC Long Distance			
• Business	—	2%	-5%
• Residential	—	3%	13%



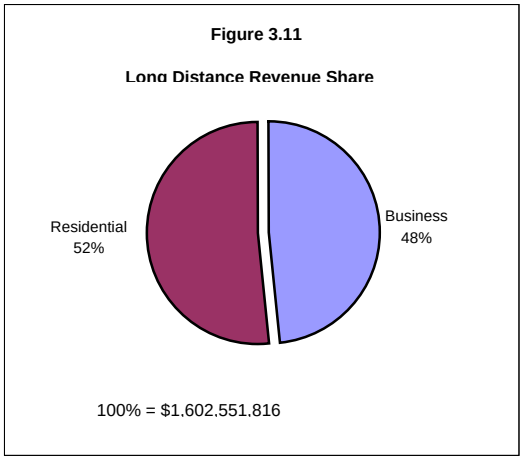


Monthly Data through March 31, 2003
Source: Responses to CPUC Wireline Data Request sent April 2003

3.1.4 Long Distance Market Share is Concentrated Among a Few Carriers

Long distance calls are calls made from a party located in one LATA to a party located in another. The California wireline long distance industry earned $1.602 billion as of December 31, 2002 with 52% of revenues ($829 million) being from residential customers and 48% ($773 million) from business customers. (See Figure 3.11.) The size of the market is smaller than previous reported data, which had placed the long distance market at $1.55 billion. Current data also shows fewer residential and more business customers than the 53% residential and 47% business distribution, which had been previously reported.[25]

[24] Under current incentive regulation rules (NRF) SBC California reports its earned rate of return (ROR) in an annual filing. Potential revenue earnings or losses have no direct link to rates since NRF sharing is currently suspended. However, a significant period of depressed earnings for the regulated operations caused from the loss in toll revenues may give a misleading indication of SBC's overall financial performance in California.
[25] Ibid, p. 16.



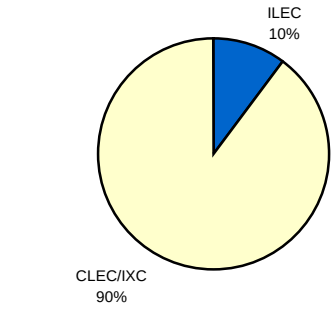
Data as of December 31, 2002
Source: Responses to CPUC Wireline Data Request sent April 2003

As of December 31, 2002, CLECs/IXCs handled 90% of the California long distance market. Verizon (or more precisely, Bell Atlantic, Verizon's long distance affiliate) held 10% of the total market share and 94% of the market share divided between the ILECs. Three months later the CLEC/IXC share dropped to 87%, while the ILECs share increased to 13%, of which Verizon held an 85% market share. (See Figures 3.12a, 3.12b and 3.13a.)

As of March 31, 2003, three months after receiving regulatory authority to provide long distance service in California, SBC - or more precisely it's long distance affiliate, SBC Long Distance - had captured 1.2% of the total market share (1.7% of residential long distance and 0.5% of business long distance), and 9% of the ILEC's market share.
(See Figure3.13b)

Figure 3.12a

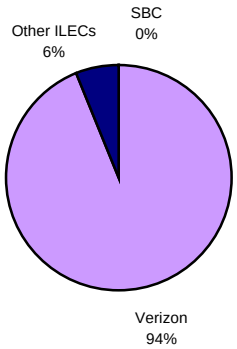
Long Distance Revenue Share as of December 2002



100% = $1,602,551,816

Figure 3.12b

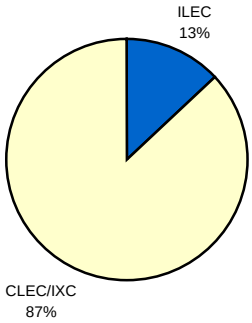
ILEC Long Distance Revenue Share as of December 2002



100% = $162,644,956

Figure 3.13a

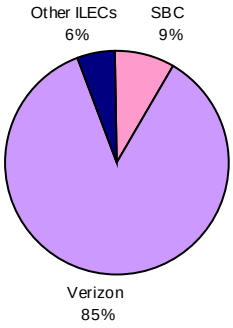
Long Distance Revenue Share as of March 31, 2003



100% = $342,825,582

Figure 3.13b

ILEC Long Distance Revenue Share as of March 31, 2003



100% = $44,347,763

Source: Responses to CPUC Wireline Data Request sent April 2003

Data continues to indicate that California's long distance market share is concentrated among a few carriers. The top providers of residential long distance service in the California market as of December 31, 2002 were AT&T, WorldCom and Verizon. (See Figure 3.14.) Together these three carriers control 85.7% of the residential long distance market. Similarly, the top service providers in the California business long distance market, handling 88.9% of the market, were AT&T, WorldCom and Sprint.

Figure 3.14
Top 3 Long Distance Companies
(Based on 2002 Long Distance Revenues)

Ranking	Residential Market	Business Market
1st	AT&T	AT&T
2nd	WorldCom	WorldCom
3rd	Verizon	Sprint

3.1.5 Lower UNE Prices Are Leading to Increased UNE Lease Volumes in California, and Are Stimulating Competition

There are two methods for CLECs to gain entry in the local and local toll voice service markets using ILEC facilities.[26] One method is to lease from the ILEC a UNE two-wire analog loop that connects the customer's location to the ILEC's central office, which then allows all the necessary switching functions and features like call-waiting and caller-ID to work with the CLEC's own switches. The second method is for a CLEC to lease both the copper loop and the switching functions and features from the ILEC. The second method is commonly referred to as UNE-Platform or UNE-P.

The UNE-P is a very popular method for a CLEC to enter the voice service market because it allows the CLEC to do so without having switches in place to serve that particular market. The method gives CLECs the opportunity to first build up the customer volume needed to make the ultimate investment and ownership of switches economical.

Historically the volume of competition stimulating UNE-P leases in California has been much lower than the volume of leased UNE loops. Many CLECs claim this situation has been the result of unjustifiably high UNE-P prices the Commission has set for SBC and Verizon (the state's two major ILECs). Notwithstanding this lack of UNE-P volume, competition in the voice service market in SBC territories has been much more robust than in Verizon territories. One reason for this difference is that the Commission adopted a comprehensive set of UNE prices for SBC in 1999. Another major reason competition in SBC territories has been more robust is that SBC, in an effort to gain state and federal approvals for its entry into the long-distance market, has undertaken many actions and measures to open up its local market to CLECs. Verizon California, formerly GTE, did not need to gain state or federal approval for its entry into the state's long distance market.

The Commission has not yet finished its price review of Verizon UNE rates. In fact, since the beginning of 2002 in response to CLEC petitions that ILECs' costs for UNE-P have decreased significantly, the Commission has embarked on a new effort to review and determine the most appropriate prices for leasing UNE-Ps for both ILECs. While this review is ongoing, the Commission has adopted lower interim UNE rates for both SBC and Verizon that have had the effect of allowing more CLECs to enter the voice service market. The Commission established SBC's interim rates in September 2002, and adopted interim Verizon rates in March 2003.

In order to determine how all the events described above have impacted UNE lease volumes and competition, the staff requested data from Verizon and SBC on monthly 2-wire analog loop and UNE-P lease volumes for the period January 2002 through May 2003.

The data provided staff by Verizon and SBC show that there has been a significant increase of UNE-P market volume in the territories of both of the ILECs between January 2002 and May 2003. In the case of SBC territories, the UNE-P lease has reversed its market share position with the analog 2-wire loop lease, becoming the dominant method for CLECs to use to compete against SBC in the voice service market. Verizon UNE-P lease volume during this period grew from the minuscule number of six leases to 7,636 leases. SBC's

[26] CLECs can also enter these markets and compete against an ILEC by building their own networks. The cable companies that provide voice service through their own coaxial networks are perfect examples of this method of entry.

UNE-P lease volume also grew significantly, rising from 87,130 to 1,158,263 over the period (See Figures 3.15, 3.16 and 3.17.)

Figure 3.15

	Verizon					SBC			
	Total No. of Access Lines: 4,549,178					Total No. of Access Lines: 18,553,395			
	2-Wire Analog Loop Volume	UNE-P Volume	2-Wire Analog Loop Share	UNE-P Share		2-Wire Analog Loop Volume	UNE-P Volume	2-Wire Analog Loop Share	UNE-P Share
Jan-02	50,424	6	**99.99%**	**0.01%**		337,248	87,130	**79.47%**	**20.53%**
Feb-02	50,536	195	**99.62%**	**0.38%**		346,693	97,726	**78.01%**	**21.99%**
Mar-02	51,100	199	**99.61%**	**0.39%**		355,795	111,078	**76.21%**	**23.79%**
Apr-02	52,263	138	**99.74%**	**0.26%**		363,947	123,251	**74.70%**	**25.30%**
May-02	53,860	137	**99.75%**	**0.25%**		371,826	161,234	**69.75%**	**30.25%**
Jun-02	57,040	124	**99.78%**	**0.22%**		375,262	206,799	**64.47%**	**35.53%**
Jul-02	58,188	96	**99.84%**	**0.16%**		377,108	255,941	**59.57%**	**40.43%**
Aug-02	58,638	461	**99.22%**	**0.78%**		379,905	308,372	**55.20%**	**44.80%**
Sep-02	58,188	96	**99.84%**	**0.16%**		380,116	394,705	**49.06%**	**50.94%**
Oct-02	57,466	842	**98.56%**	**1.44%**		379,759	503,879	**42.98%**	**57.02%**
Nov-02	56,692	787	**98.63%**	**1.37%**		380,675	631,946	**37.59%**	**62.41%**
Dec-02	57,514	1,962	**96.70%**	**3.30%**		379,048	743,271	**33.77%**	**66.23%**
Jan-03	57,739	2,489	**95.87%**	**4.13%**		376,853	822,012	**31.43%**	**68.57%**
Feb-03	57,702	3,732	**93.93%**	**6.07%**		374,620	933,884	**28.63%**	**71.37%**
Mar-03	57,592	4,624	**92.57%**	**7.43%**		367,913	1,029,753	**26.32%**	**73.68%**
Apr-03	57,387	5,900	**90.68%**	**9.32%**		362,990	1,104,297	**24.74%**	**75.26%**
May-03	56,794	7,636	**88.15%**	**11.85%**		360,907	1,158,263	**23.76%**	**76.24%**
Growth Rate	**13%**	**127167%**				**7%**	**1229%**		
Combined Growth Rate	**22%**					**72%**			

Figure 3.16

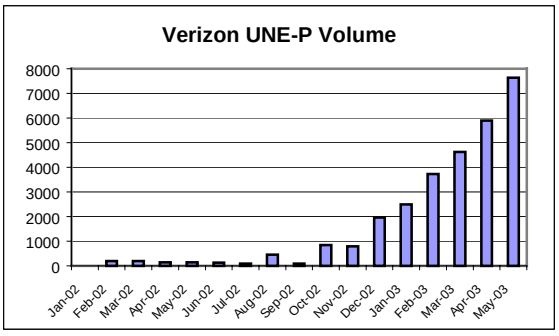
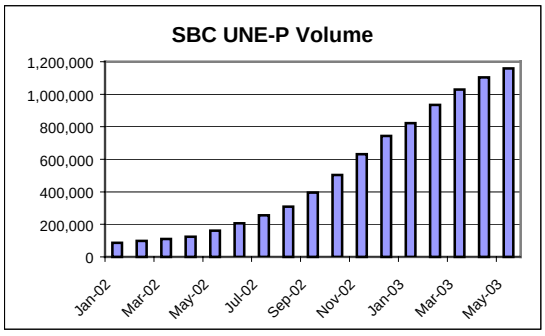


Figure 3.17

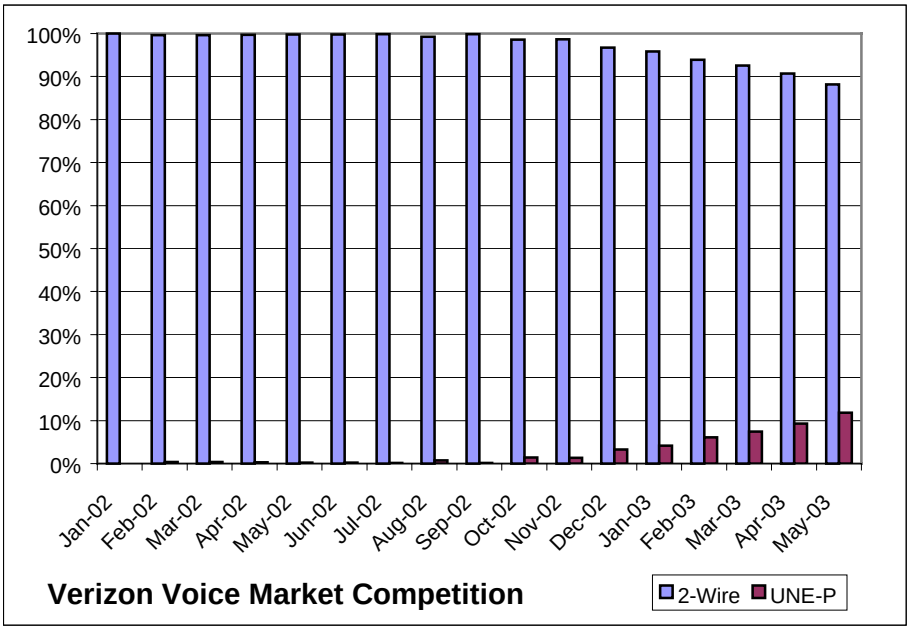


Compared with UNE-P's growth, the growth rates of 2-wire analog loop leases from the two major ILECs were noticeably more modest between January 2002 and May 2003. Verizon's

2-wire analog loop lease volume grew only 13%, from 50,424 to 56,794, while SBC's volume grew only 7%, from 337,248 to 360,907.

Between March 2003 (when the Verizon interim UNE-P price reduction became effective) and May 2003, UNE-P lease volume in Verizon territories grew 65% and increased its share of Verizon's voice service competition to 11.85% (up from 7.43%).[27]. While UNE-P entry still only represents less than 12% of Verizon's voice service competition, that amount represents a dramatic increase from the January 2002 level of 0.01%. (See Figure 3.18.)

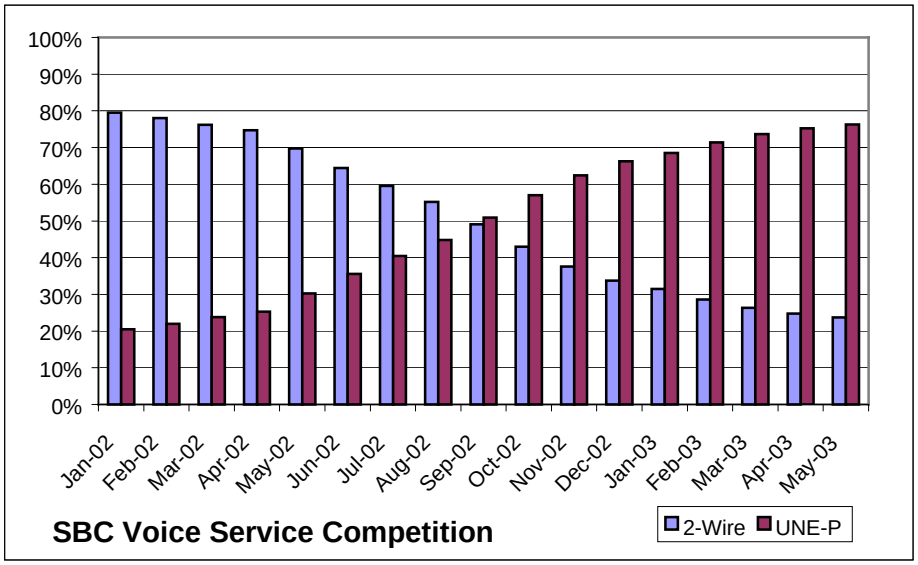
Figure 3.18



The change in the voice service market shares of the 2-wire analog loop lease versus the UNE-P lease is much more dramatic in the SBC territories. Between January 2002 and May 2003, a complete reversal in the make-up of voice service competition took place. During that period, UNE-P's share went from 20.53% to 76.24%, while 2-wire analog loop's share declined from 79.47% to 23.76%. (See Figure 3.19.)

[27] During the same time period, 2-wire analog loop volume decreased 1.39%.

Figure 3.19



It appears that the Commission's action in adopting the interim UNE-P price for SBC in September of 2002 (and also for Verizon in March 2003), as well as SBC's efforts to open up its local market to gain state and federal approvals to enter California's long distance market, have had a very profound and positive impact on competition in the state's voice service market. These events have stimulated more CLECs to enter the voice service market by leasing increasing UNE-P volumes from SBC.

The large increase in UNE-P leasing and the nearly flat 2-wire analog loop volumes occurring between January 2002 and May 2003 may also be related to the recession's impact on the telecom industry. The dramatic growth in UNE-P volume would indicate that there is no shortage of CLECs wanting to compete against ILECs, but that they have been limited in doing so by a combination of difficult economic times, high UNE prices and ILEC efforts to keep the market closed. UNE-P became the only remaining logical method for them to enter into the voice service market to compete against SBC. The UNE-P growth may also be an indicator that people are quite willing to switch local service providers for the right combination of price and service.

Finally, the flat 2-wire analog loop growth rate may be a sign that CLECs are having difficulties financing the large amounts of capital that are needed to purchase switching equipment, despite the fact that a higher profit margin will follow once they lease the 2-wire loop from ILECs like SBC and Verizon.

3.2. Voice Communications – Wireless Services

The wireless data request that was sent to California wireless carriers solicited market information on trends in overall subscribership (customers) and revenues. Data was received from the five dominant wireless carriers plus 10 smaller competing firms.

3.2.1. Wireless Industry: Top 5 Wireless Carriers Continue to Hold Dominant Market Share in California.

As was the case in the *Status of Telecommunications Competition in California Second Report*, this CPUC staff analysis of wireless carriers' customers and revenues indicates a market concentrated among the same previously identified top five companies (listed alphabetically): AT&T Wireless, Cingular Wireless, Nextel Communications, Sprint PCS, and Verizon Wireless. As of March 31, 2003, these five carriers had nearly 16.5 million customers, equating to just under 95% of the sampled market's total. These same carriers earned roughly $2.52 billion in combined revenues between January 1 and March 31, 2003 (annualized for a twelve-month total of over $10 billion), or about 96.2% of the sampled market's revenues. The combined market share, in terms of customers and revenues, for the top five carriers has fallen slightly since year-end 2002, decreasing approximately 1% for both customers and revenues. (See Figure 3.20.)

Figure 3.20
Trends in Wireless Customers and Revenues
Top 5 Companies in California

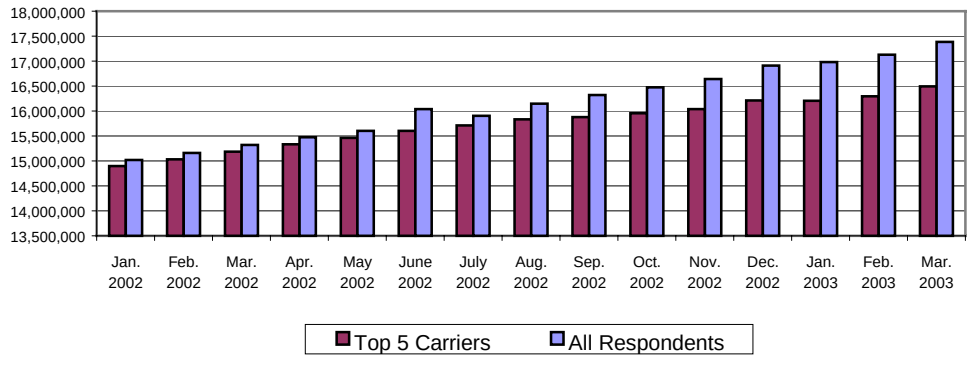
	2000	2001	2002	March 2003
Customers	12,359,848	14,919,715	16,208,900	16,491,142
Percentage of Sampled Market	99.35%	99.25%	95.86%	94.85%
Revenues	$5,645,485,306	$8,968,751,592	$9,822,285,800	$2,524,636,346*
Percentage of Sampled Market	97.27%	96.98%	97.11%	96.20%

*Revenue is for the period January through March 2003. Using this figure, annualized 2003 revenue would be $10,098,545,385.

Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003

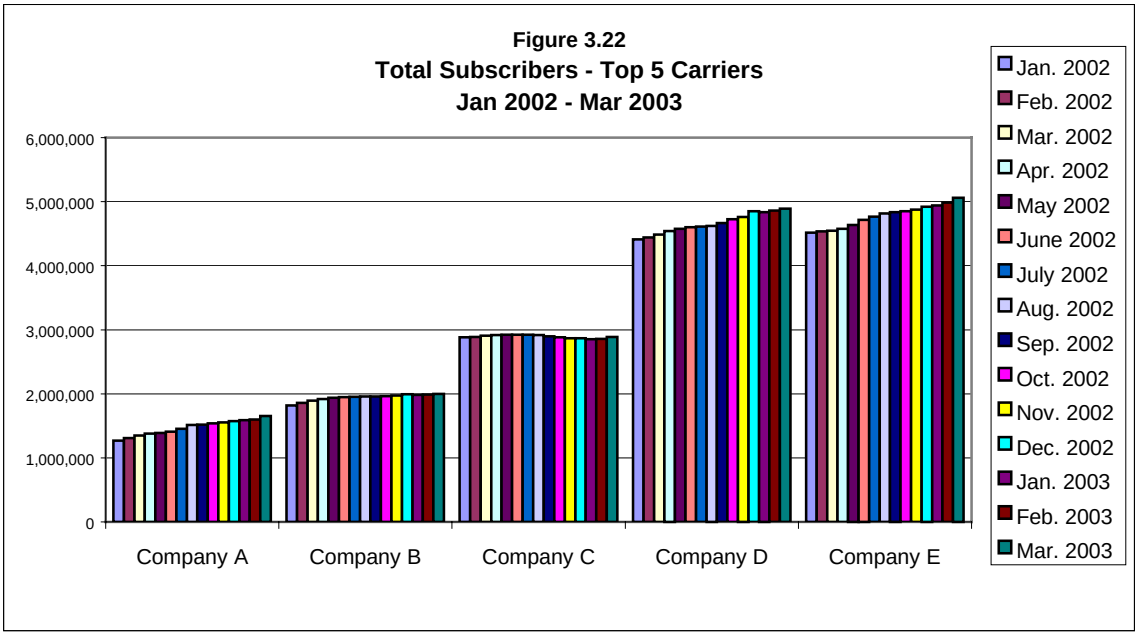
From January 2002 through March 2003, the combined total of the responding carriers' wireless subscribers grew from approximately 15 million to nearly 17.4 million (a 15.8% increase). The top five of these carriers saw an increase of 10.7% in subscribership in this period, from 14.9 million to 16.5 million. (See Figure 3.21.)

Figure 3.21
Total Subscribers - Top 5 vs All Respondents
Jan. 2002 - Mar. 2003



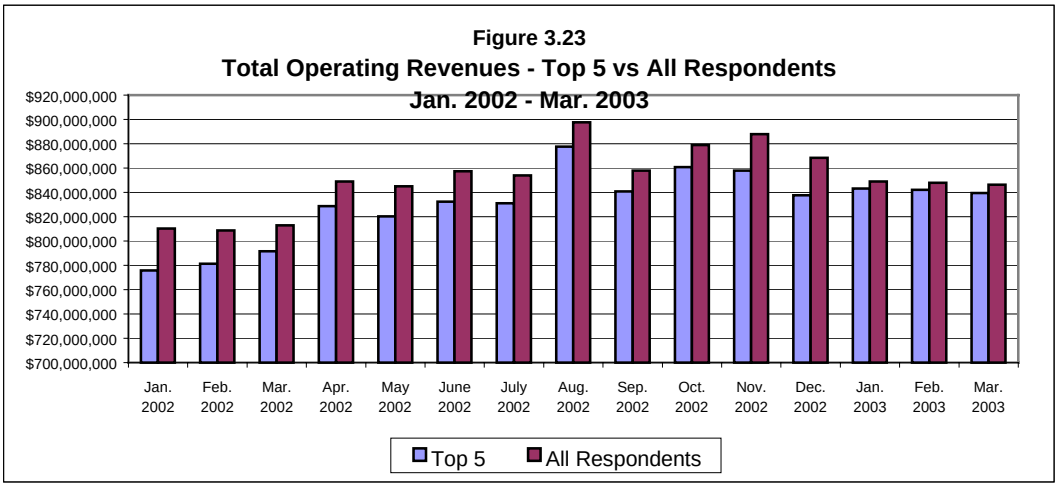
Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

Notwithstanding the increasing subscribeship trend reflected in Figure 3.16, the third largest respondent experienced a decline in subscribers that began in September 2002. As of March 2003, however, this company's subscribership still remained about ¼% above its January 2002 level. The smallest of the top five carriers experienced a 23% increase in customers, while the second smallest, second largest, and largest carriers' customer base grew roughly 9%, 10%, and 11% respectively. (See Figure 3.22.)



Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

The top five wireless carriers have also experienced overall growth in terms of revenues. Combined monthly revenues for January 2003 were 8.7% higher than those for January 2002. Peaking in August 2002 at close to $880 million, the top five wireless carriers' revenues declined through Fall 2002, and hovered around $840 million from December 2002 to March 2003. (See Figure 3.23.)

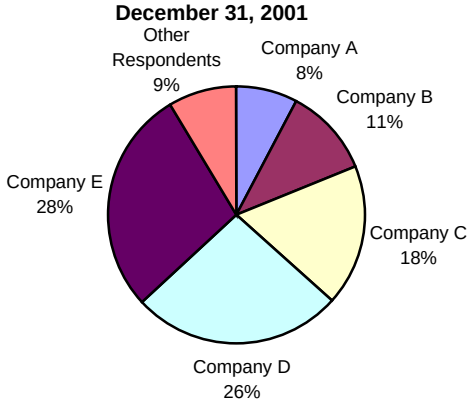


Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

3.2.2. Wireless Industry: Top 5 Market Share Similarly Distributed Across Years

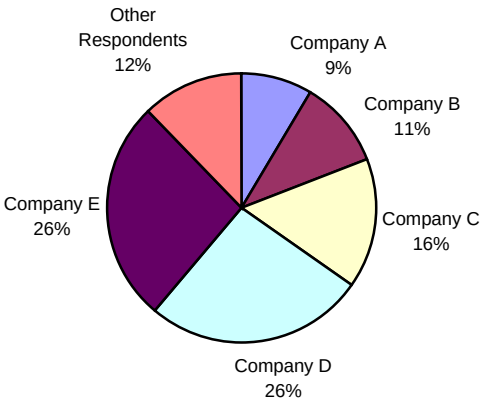
The market share of the top five wireless carriers in terms of subscribership has remained relatively stable through 2002 and early 2003. While minor fluctuations in the percentage shares of the total sampled market have occurred, the top five carriers have remained in the same relative positions. Of note, however, is the increasing market share of carriers outside of the top five companies with the share of the "other respondents" rising from 9% in December 2001 to 13% in March 2003. (See Figures 3.24 through 3.27.)

Figure 3.24
Total Subscribers - Top 5 vs Others
December 31, 2001



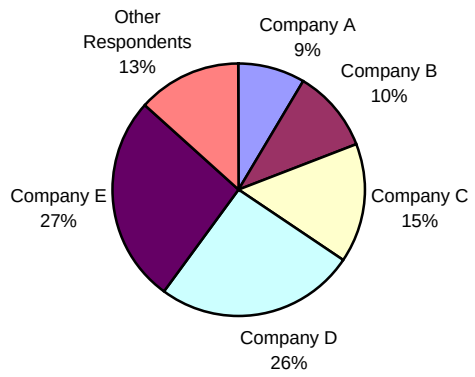
Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

Figure 3.25
Total Subscribers - Top 5 vs Others
December 31, 2001



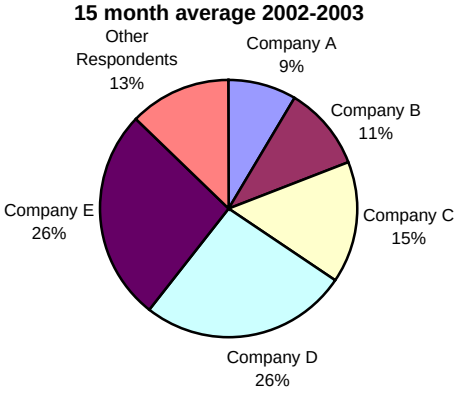
Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

Figure 3.26
Total Subscribers - Top 5 vs Others
March 31, 2003



Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

Figure 3.27
Total Subscribers - Top 5 vs Others
15 month average 2002-2003

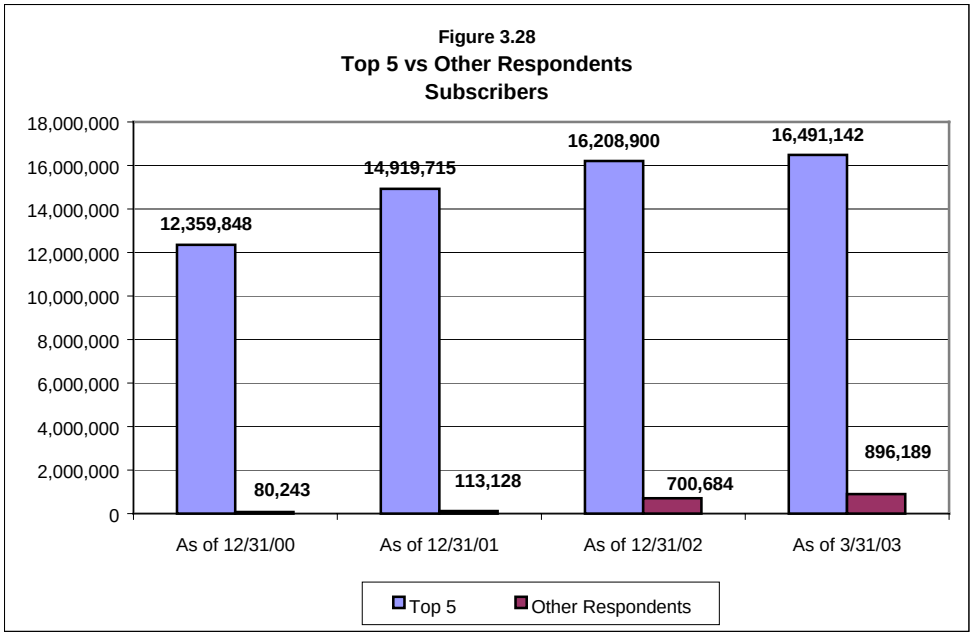


Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

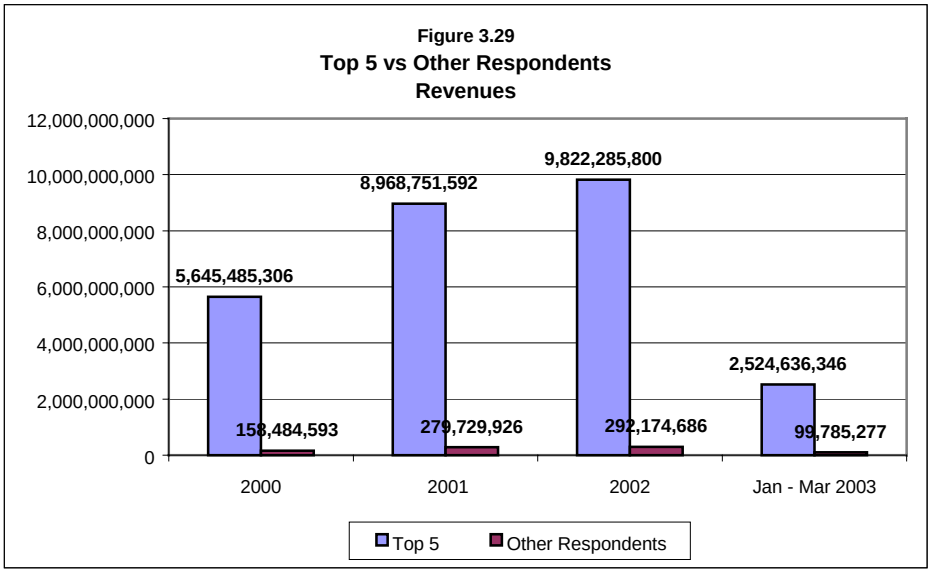
3.2.3. Wireless Industry: Revenues of Small Wireless Companies Are Growing

In addition to the top five wireless carriers already mentioned, the 10 other wireless carriers responded to the CPUC's wireless data request were (in alphabetical order): California-RSA, Cal North Cellular, Cricket Communications/Leap Wireless, El Dorado Cellular; Excel Communications, MCI/Worldcom, Nova Cellular West, SureWest Wireless, T-Mobile, Working Assets. These respondents have experienced tremendous growth in both subscribers and revenues through 2002 and early 2003. Their subscriber base rose 519% from year-end 2001 to year-end 2002, and in the first 3 months of 2003 rose approximately 28% from year-end 2002. This group's combined revenues rose 4.45% from 2001 to 2002, and an estimated 36.6% from 2002 to 2003. The top five carriers' combined revenues,

meanwhile, increased 9.5% from 2001 to 2002, and only 2.8% from 2002 to 2003.[28] (See Figures 3.28 and 3.29.)



Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.



Source: Responses to CPUC Wireless Carrier Data Request sent to carriers April 2003.

[28] As shown in Figure 3.29, the combined revenues for the top five carriers for January through March 2003 were $2,524,636,346. The combined revenues for the other 10 carriers were $99,785,277 for that period. Thus, when annualized for 2003, these revenues become $10,098,545,385 and $399,141,110, respectively.

3.3 Broadband Communications - Digital Subscriber Line Service (DSL)

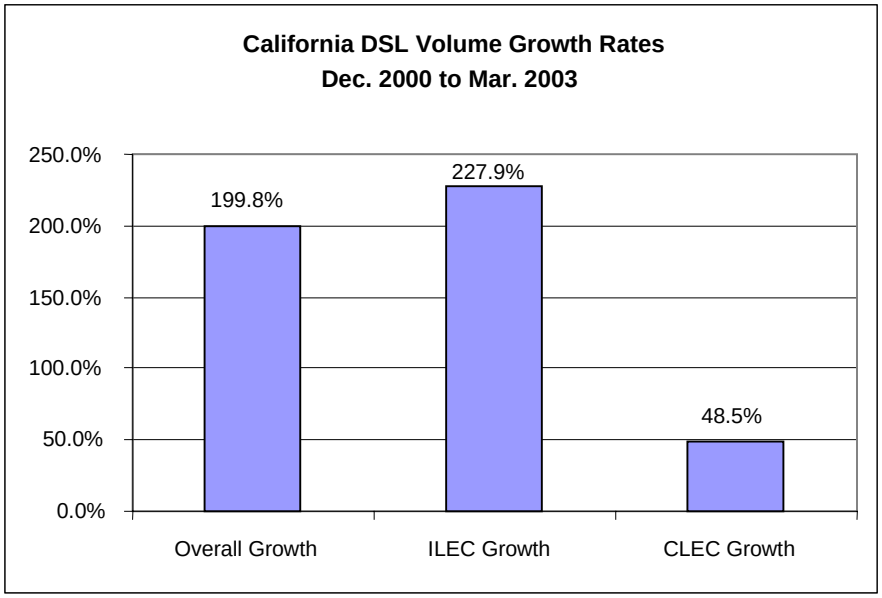
Thirty of the 274 wireline carriers surveyed reported that they offer at least one type of broadband service. Eighteen indicated that they were offering DSL service as of March 31, 2003. Of those 18 carriers, 12 are ILECs or ILEC affiliates[29] while the remaining 6 carriers are CLECs.[30]

3.3.1 The DSL Market Share of the Dominant ILEC and ILEC Affiliates Continues to Grow in California

DSL is a broadband service that relies on the traditional copper telephone wire to transmit broadband data to and from the service customer's location. DSL has many different variations based on differing technical requirements and speed. The most popular iteration is ADSL (Asymmetric DSL), which allow both voice and broadband data to be transmitted over the same pair of copper telephone line.

The data reported by the 18 DSL service providers show that from December 2000 to March 2003, California's overall DSL market grew from 704,251 to 2,111,093 lines, an increase of 200%. However, the market growth rates of ILECs versus CLECs over this period have been far from uniform. As a group during these 27 months, the ILECs' DSL volume increased 228%, while CLECs experienced a more modest 48% increase in DSL volume. (See Figure 3.30.)

Figure 3.30



Source: Responses to CPUC Wireline Carrier Data Request sent April 2003.

[29] The 12 ILECs are: Cal-Ore Telephone, Citizens Telecom of California, Citizens Telecom of Golden State, Evans Telephone, Kerman Telephone, Roseville Telephone, SBC Advanced Solutions, Inc., Sierra Telephone, The Ponderosa Telephone, The Siskiyou Telephone, The Volcano Telephone, and Verizon Advanced Data, Inc.
[30] The 6 CLECs are: Arrival Communications, AT&T Communications, Covad, DSLNet, New Edge Networks, and U.S. Telepacific Corp.

A possible factor for the much slower rate of growth for CLECs could be the financial difficulties many have experienced since the beginning of the downturn in the economy and the related collapse of the dot.com boom. Since the beginning of this business cycle, many CLECs offering DSL service went through downsizing, reorganization, bankruptcies or liquidation.[31]

Figures 3.31 through 3.34 show how the CLECs share of the DSL service market in California has fallen between the end of 2000 and March 2003. As of March, the CLECs' market share was only half of what it was in December 2000. The ILEC's market dominance became further entrenched during that time.

Figure 3.31

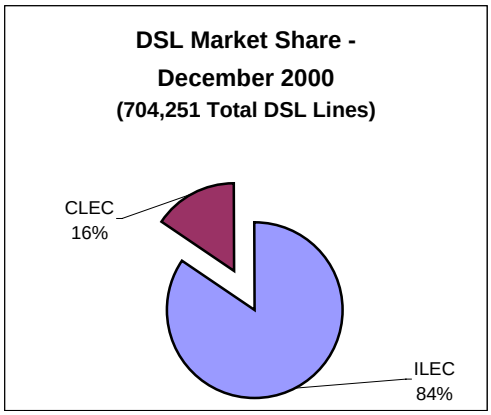


Figure 3.32

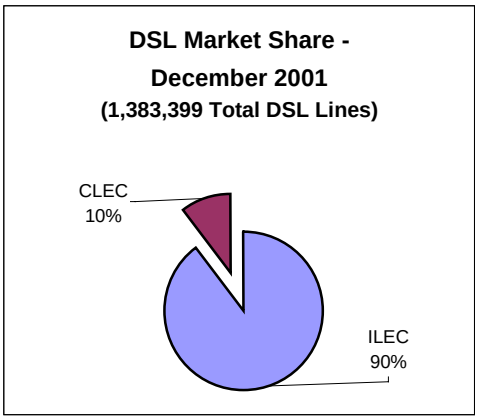


Figure 3.33

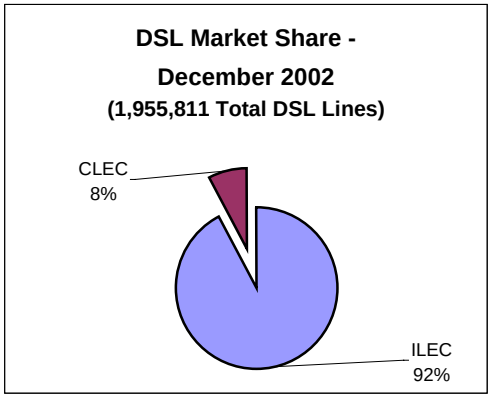
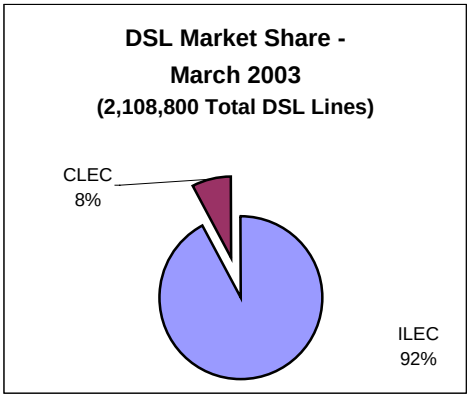


Figure 3.34

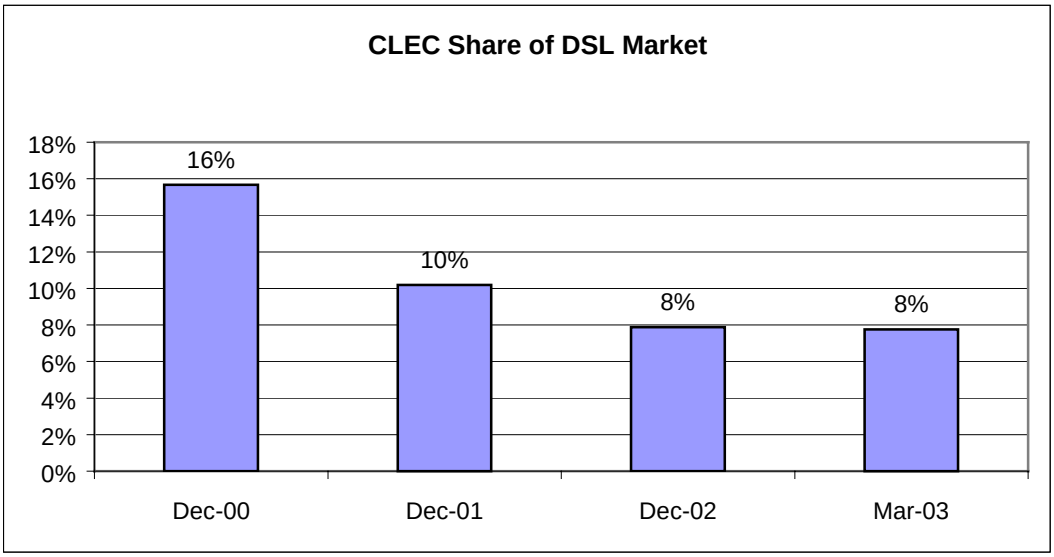


Source: Responses to CPUC Wireline Data Request sent April 2003.

Figures 3.35 and 3.36 contrast the market share trend of CLECs with that of SBC Advanced Solutions, Inc. and Verizon Advanced Data, Inc. (SBC's and Verizon's affiliates) from December 2000 to March 2003.

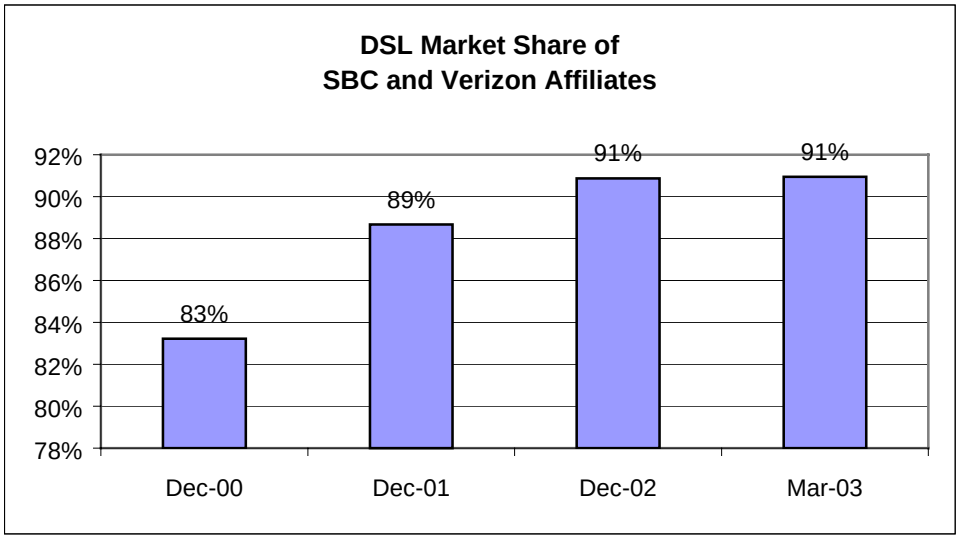
[31] Both Covad and Northpoint, two of the largest CLEC DSL providers, had to file for bankruptcy. Northpoint is no longer in operation; while Covad just recently emerged from bankruptcy proceeding.

Figure 3.35



Source: Responses to CPUC Wireline Data Request sent April 2003.

Figure 3.36



Source: Responses to CPUC Wireline Data Request sent April 2003.

While CLECs' DSL market share declined to 8% from a high of 16%, the two large ILECs (i.e. – the SBC and Verizon affiliates) gained market share from 83% to 91%. Throughout this period, the small ILECs'[32] market share remained constant at 1%.

[32] Small ILECs are ILECs other than the SBC and Verizon affiliates.

While the two major ILECs' unbundling requirements for DSL-capable loops and line sharing are still in effect, and even though the Commission has adopted new and lower rates for these two UNEs, there is no vigorous competition in California's DSL market. [33] It is difficult to identify a single reason for this condition because it is likely caused by a combination of many factors. They include the ILECs' fierce protection of their market share, high UNE rates, technical and operational interconnection difficulties between CLECs and ILECs, and CLECs' own marketing and operational shortcomings.

Regardless of why DSL market competition is not more robust, the end result is that California is left with a broadband market that is increasingly a duopoly of large ILEC provided DSL service and cable modem service[34]. And it is likely that the ILECs' domination of the DSL market will grow even further. Because the cable companies do not now face the intra-modal competition that can stem from open access,[35] the FCC appears ready to abandon that concept in the DSL market and cast the nation's lot on the promise of inter-modal broadband competition between ILECs, cable companies, other emerging broadband companies such as those now developing Wi-Fi, and the electric utilities that are developing a service termed "Broadband Over Power Line." At least in the immediate future, however, the elimination of the DSL line sharing unbundling requirement will almost certainly lead to an even lower level of competition than currently exists in the state's DSL market.

3.4 The Growing Array of Broadband Communications Technologies

Beyond the widely known DSL broadband service, there are several other broadband services and technologies on the market or in the market development stage. These broadband technologies are:

Cable Modem – One of the more popular forms of broadband service, this technology is offered by cable carriers. Broadband data is carried on the same coaxial network used by the carriers to transmit cable TV signals. Upgrades to the cable network over the last decade to allow two-way data-flow have enabled cable carriers to offer both digital cable and cable modem services. (Due to cable carriers' historic network deployment pattern, cable modem services have been a predominantly residential product not available to business customers.)

Broadband over Powerline (BPL) – This technology is similar to ADSL, except that broadband data is carried on the electricity powerline that transmit electricity to homes and offices. BPL service is currently in technical trial under the review of the FCC. BPL offers a very promising third broadband pipe option into a consumer's home in addition to DSL and Cable Modem. If successful, BPL can become the third broadband pipe into the homes.

Satellite – This technology involves a system of geo-stationary satellites orbiting above earth that receive and transmit broadband data from service subscribers. It is a still relatively expensive service but has little terrain restriction since it only require a line-of-sight of the sky, similar to satellite TV. The only major service provider today is Hughes, the same company that offers DirecTV service.

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[33] In August of this year, the FCC issued an order (FCC 03-36), which requires line sharing to be phased out over a 3-year transition period. The phasing out of line sharing will only further limit opportunities in the DSL market.

[34] For a further discussion of this situation, see Section 3.5 of this report (Broadband Market Growth in California and Throughout the U.S.)

[35] Cable carriers, unlike ILECs, do not have an open access requirement that forces them to open up their network to encourage intra-modal competition.

Fixed Wireless – Similar to satellite but the signal is transmitted and received by a radio tower which has a localized coverage area compared to satellite's continent wide coverage area. Fixed wireless broadband also required line-of-sight and its service has often suffered from terrain limitations such mountains and tall buildings.

WiFi – WiFi (Wireless Fidelity) is a wireless broadband technology utilizing FCC's unlicensed spectrum based on open international technical standard(s).[36] Because of its reliance on open standards and unlicensed (free) radio spectrum, which translates into low implementation costs, WiFi has become an increasingly popular broadband technologies, aggressively promoted and championed by major industry players such as Intel, Cisco and Microsoft.

Fiber-to-the-Home (FTTH) – A broadband service in which residential and business customers have direct connection to a fiber-optics network. This service promises the highest speed but is still in very early development stage due to its technical difficulties and high financial costs.

3.5 Broadband Market Growth in California and Throughout the U.S.

Over the past several years the FCC has been requiring broadband service providers to report semi-annually to it about the type of services they provide and how many customers they have by state. These data are reported to and released by the FCC for California and the nation as a whole, and allow a number of interesting general observations to be made about broadband market growth.[37]

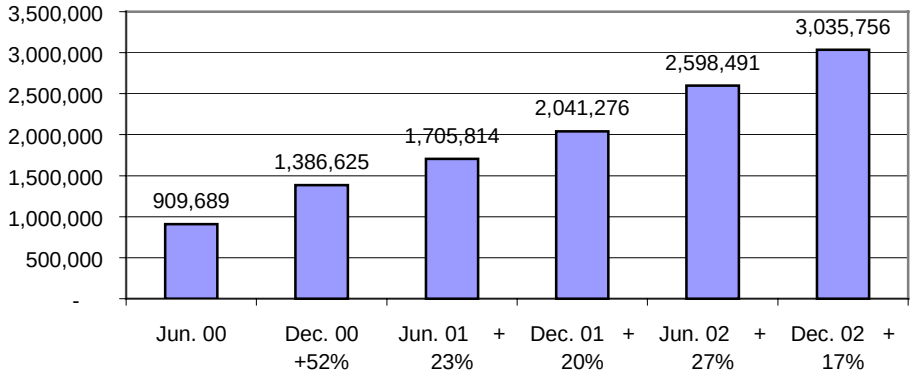
3.5.1. The California Broadband Market Has More Than Tripled in 2 ½ Years.

Between June 2000 and December 2002, the number of broadband subscribers in California increased by 334%. Subscribership increased 52% during the first six months of this 30-month period alone, but by the last six months subscriber growth had slowed to a rate of 17%. (See Figure 3.37.) This slowing rate of growth may indicate a maturing market and new sources of subscribers are needed to match past growth rates.

[36] IEEE 802.11a, b & g.

[37] FCC Reports" "High-Speed Services for Internet Access, Status as of …"June 30, 2000, December 31, 2000, June 30, 2001, December 31, 2001, June 30, 2002 and December 31, 2002". These reports are the data source for Figures 3.37 through 3.43 that follow.

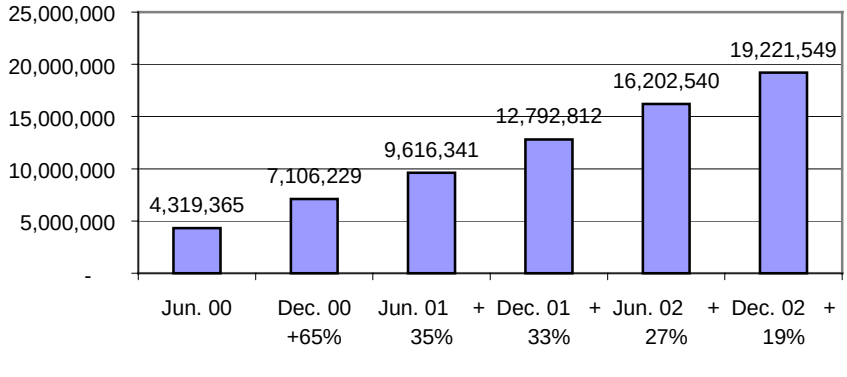
Figure 3.37
California Broadband Subscriber Growth



3.5.2 The National Broadband Market Has Grown by Nearly 450% in 2 ½ Years

Between June 2000 and December 2002, broadband subscribership in the U.S. increased by 445%. As in the case of the California market, however, the incremental rate of national subscriber growth has been declining over this 30-month period. Over the first six-month period (from June 30, 2000 through December 31, 2000) subscribership increased by 65%, while over the last six-month period subscribership grew by only 19%. (See Figure 3.38.)

Figure 3.38
U.S. Broadband Subscriber Growth



3.5.3 DSL and Cable Modem are by Far the Predominant Broadband Service Offerings in California and Throughout the U.S.

As 2002 ended, DSL and cable modem providers were serving 88% of California's broadband market. At that time, 93% of the national market was being served by these two

types of providers. (See Figures 3.39 and 3.40.) Unlike in the case of the national market, however, DSL providers had a greater share of California's broadband market. In fact, Figure 3.39. shows that as of December 2002 DSL service was poised to capture more than half of the California market. In contrast at that same point in time, cable modem service had 59% share of the entire U.S. market.

Figure 3.39
California Broadband Market Share by Service Type

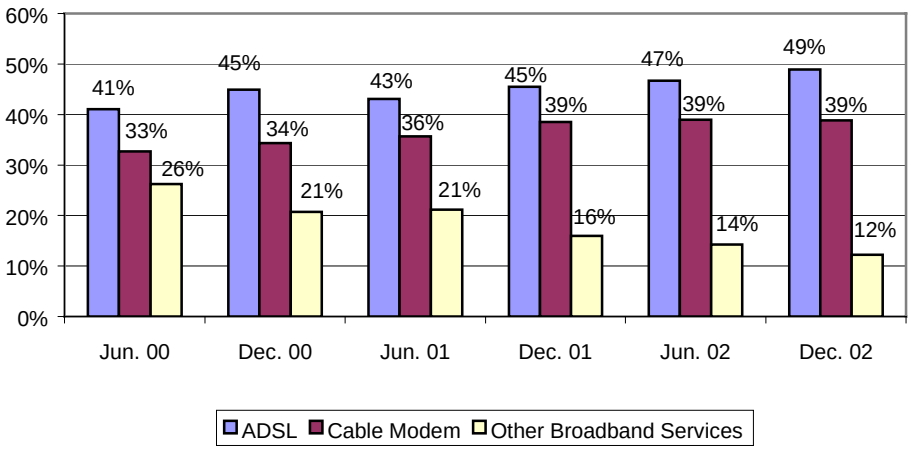
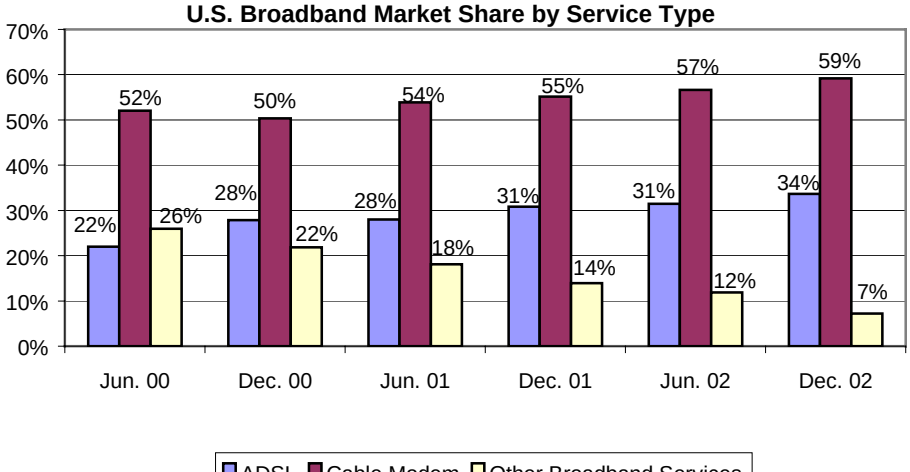


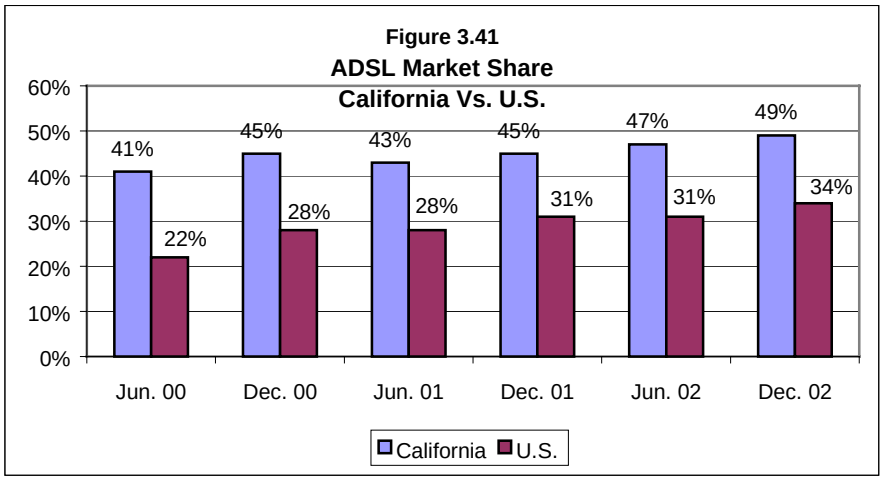
Figure 3.40
U.S. Broadband Market Share by Service Type

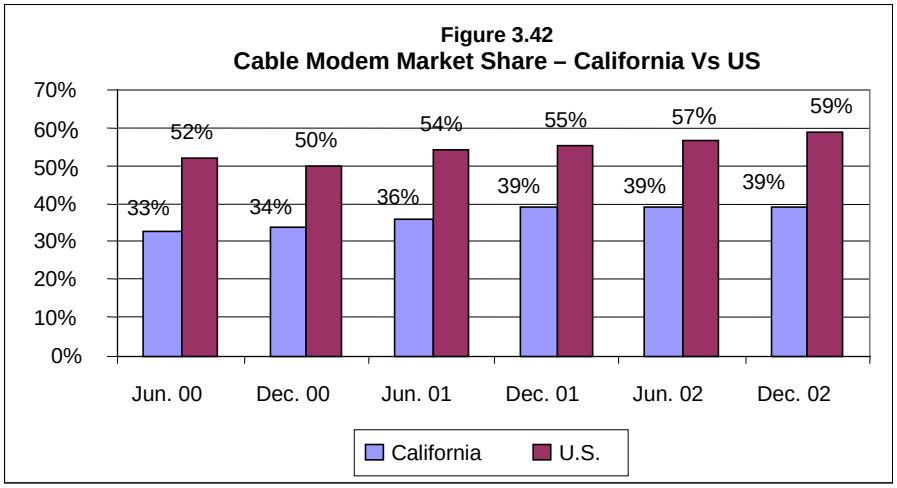


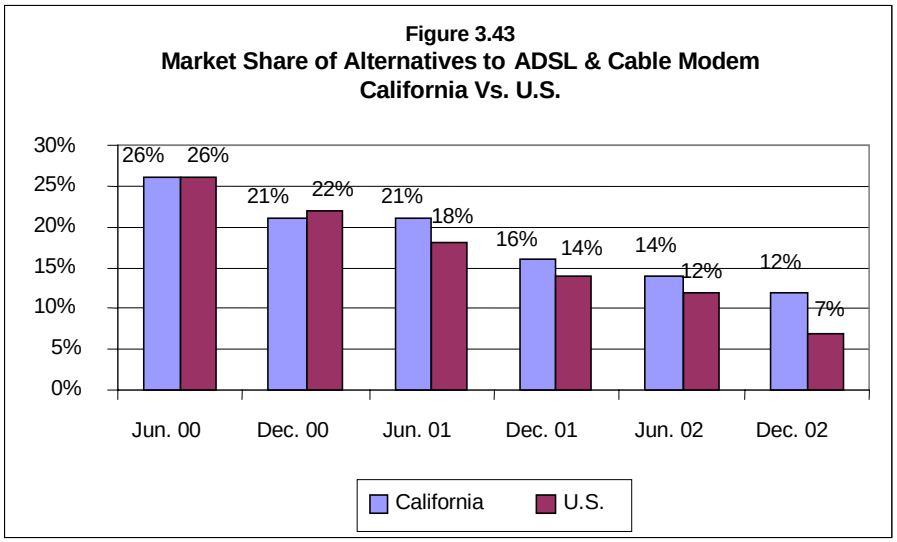
3.5.4 Together, DSL and Cable Modem Service Form a Pervasive Duopoly

The market share of DSL is increasing both in California and nationally, while the market share of cable modem is remaining steady in California and increasing nationally. (See Figures 3.41 and 3.42.) The market share of all the other broadband technologies, however,

is dwindling in the face of the increasingly pervasive DSL and cable modem duopoly. (See Figure 3.43.)







Chapter 4. Regulatory Issues Impacting Telecommunications

Chapter 4 of the report discusses key regulatory issues impacting the competitive telecommunications landscape in California. These issues include economic, regulatory, and consumer-oriented concerns. Topics include long distance market entry safeguards, service quality, number portability, and state and federal proceedings affecting competition.

4.1 SBC Commences Long Distance Service in California

By D.02-09-050 issued September 19, 2002, the Commission determined that the FCC should authorize SBC's entry into the state's long distance market. SBC subsequently petitioned the FCC for that entry authorization, and its request was approved on December 19, 2002. Since that time, the CPUC has been monitoring the competitive result of the action and has been considering implementation of some proactive competitive safeguards it ordered reviewed as potentially appropriate conditions of SBC's market entry.

4.1.1 Consideration of Third Party Primary Interexchange Carrier (PIC) Administration and Structural Separation

Currently when a telephone service customer living within SBC's California service territory wants to choose a new long distance carrier (a PIC), the process is administered by SBC. Since SBC can now also function as the customer's PIC, its historic role as PIC administrator presents a potential competitive conflict for the ILEC. As a result, the Commission may open a rulemaking to determine whether it is now necessary to choose a more neutral third party to perform the PIC administration function in SBC's territory.

Because many of SBC's local competitors utilize SBC's OSS and other of its local network elements to provision service for their customers, an idealized competitive model may be for SBC to have separate retail and wholesale network operations. With this in mind, the Commission in D.02-09-050 required SBC to submit a study on the costs associated with such a separation and divestiture.

4.1.2. Expedited Dispute Resolution Process for Issues Arising Between SBC and CLECs a Necessary Safeguard

When the Commission recommended to the FCC that SBC be allowed into the long distance market in California last year, it also decided that a new, expedited dispute resolution (EDR) process should be implemented to resolve the most difficult operational disputes that arise between ILECs and CLECs. In November 2002, SBC and other interests – including CLECs - proposed a consensus process they believed would satisfy this Commission mandate. The Commission adopted this consensus process in principle in December. In a first application of the EDR process, on July 14, 2003, MCI Metro Access Transmission Services LLC (MCI) filed Complaint 03-07-020 and requested Commission mediation in a interconnection dispute against SBC. Accordingly, the matter has been handled expeditiously. At this writing, parties have tentatively agreed upon a settlement and are in the process of defining terms.

4.2. ILEC Performance Incentive Plans Seek to Assure That CLEC Customers Receive the Same Service as ILEC Customers

Anticipating that large ILECs would be entering California's long distance market, the Commission adopted a Performance Incentive Plan (PIP) for SBC in March 2002 to help assure it would be providing the same level of service to its CLEC customers in the local market as it does to its own customers. The PIP established a mechanism to measure SBC's performance and makes adjustments to the rates SBC charges the CLECs and ratepayers for local exchange service and OSS services. Poor performance, identified by statistical standards or benchmarks, leads to monetary amounts that SBC must credit to CLECs and ratepayers. Implemented in April 2002, the PIP identifies the payment for sub-par performance results, how any payments made will be increased if performance worsens, and how they will be shared between the CLECs and the ratepayers. Figure 4.1 shows the incentive credit amounts paid by SBC between April 2002 and March 2003, and how these amounts were shared.

Figure 4.1
Performance-Based Incentive Credit Amounts Paid by SBC (April 2002– March 2003)

Credited To	Total
CLECs	$5,576,064
Ratepayers	$2,514,584
Total	$8,090,648

Source: Performance Incentives Plan Implemented in April 2002.

Because the PIP serves to motivate SBC to improve its performance results and improve trouble-shooting when performance problems occur the PIP needs to be dynamic. To assure that is the case, the Commission has initiated a PIP review to allow SBC and CLECs to collaborate and develop proposals for needed new performance measures. New measures covering special access for CLECs to SBC facilities are expected to be proposed by the parties this fall as a result of this PIP review.

While performance measures were adopted for Verizon at the same time as for SBC, there is yet no PIP established to assure performance accountability for the former ILEC. It is anticipated that an effort to implement a PIP for Verizon will commence in the near future.

4.3 Local Number Portability: Of Growing Importance to CLEC Market Share

4.3.1 Switching Phone Numbers: A Barrier to Competition

In an openly competitive telecommunications marketplace, consumers need to be able to choose and move freely among multiple telecommunications service providers. Especially in the local telephone market, consumers may be deterred from switching to a new service provider if switching requires consumers to assume a new phone number. Congress, the FCC, and the CPUC addressed this problem by requiring most wireline phone companies to allow customers to switch between phone service providers while retaining their original telephone number.[38] The process of switching is called number porting.

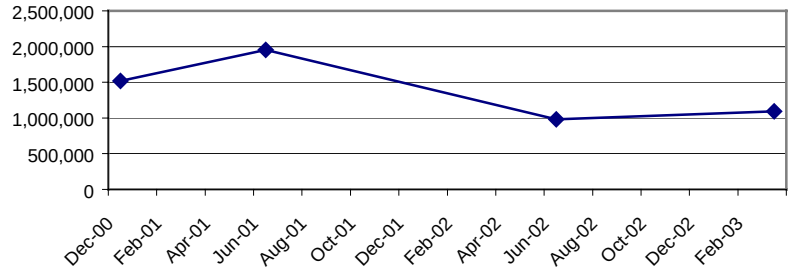
[38] Section 251(b)(2) of the 1934 Communications Act as added by the 1996 Telecommunications Act, and First Report and Order and Further Notice of Proposed Rulemaking, 11 FCC Rcd 8352, Paragraph 165.

4.3.2 Number Porting Activity Is Holding Steady

Local phone number porting among wireline carriers began in California in May 1998. As of March 31, 2003, 34 local service providers (three ILECs and 31 CLECs) were on record as active participants in number porting, either having lost customers that had taken their number to a competitive provider, or having gained customers that had brought their number with them.

After decreasing dramatically last year from June 30, 2001 to June 30, 2002, the number of ports has steadied. As of June 30, 2001, 1.9 million ports, nearly 5% of the local market, were in effect. As of June 30, 2002, just over 981,000 ports, or 2.5% of the local market, were in effect. While there were over 350,000 new ports from June 2001 to June 2002, only 50% of those ports in effect on June 30, 2001 remained by June 30, 2002. All, but two CLECs, lost total ported customers during the twelve months. By March 31, 2003, 1.1 million ports, or approximately 2.7% of the local market, were in effect. As contrasted to 50% last year, 94% of those ported customer in June 2002 remained ported in March 2003. It may be concluded that the high of 1.9 million ports in June 2001 represents customers experimenting with a CLEC with approximately half of the customers returning back to the original ILEC. The other 50% of the ported-in customers remained with the CLEC. The chart below shows the trend of wireline LNP since December 31, 2000.

Figure 4.2
Number of Wireline Ports



Consistent with previous years' data, number porting is none-the-less more critical to CLECs than to ILECs competing in the state and, thus, the CPUC supports its continued use. Most number porting is used to enable customers to leave an ILEC in order to take service from a CLEC. While ported customers account for a small net loss to ILECs, they constitute a significant share of the CLEC customer base. In June 30, 2001, over 1.6 million numbers were ported to CLECs, comprising 29% of CLEC assigned customers. By June 30, 2002, less than 800,000 numbers were ported to CLECs, comprising only 16% of CLEC assigned customers. As of March 31, 2003, 97% of the 1.1 million ports were to CLECs. This represents 19% of the CLEC assigned customers. If number porting were not available, CLECs would presumably lose 19% percent of their local market share.[39]

Since number porting is generally beneficial to CLECs, the significant drop in number porting from last year and this year's small increase indicates that CLECs as a group are not doing as well in gaining market share as they were when inception of number porting began. Since last year, only one new CLEC has begun porting in customers while four other CLECs

[39] Assuming that these customers would not switch carriers if they had to change their telephone numbers.

from last year dropped out of number porting. Of the 30 CLECs with ported customers remaining from last year, 18 gained ported customers, 9 lost ported customers and 3 had no change.

4.4 Wireless Number Portability: Critical to Competition and Consumer Choice

Wireless number portability will allow wireless customers to retain their phone number when switching to a new service provider, whether wireline or wireless. The FCC has given the wireless carriers four extensions for implementation of wireless number portability and the current deadline is November 24, 2003.[40] Verizon Wireless had petitioned the FCC to permanently forbear from the number portability requirement for wireless carriers. While the FCC declined this request, it did grant the wireless carriers a one-year extension of the previous deadline of November 24, 2002. However, Verizon Wireless and the Cellular Telecommunications and Internet Association (CTIA) appealed the FCC order to the D.C. Circuit Court of Appeal on the basis that the FCC's mandate violates Section 10 of the Communications Act. The Court denied this appeal on June 6, 2003. Since this ruling, Verizon Wireless has said that it would no longer fight the wireless LNP order and is working to comply with the November 24 deadline. In the meantime, CTIA, AT&T Wireless, Cingular and Alltel have now appealed to the FCC challenging the FCC's statutory authority to require wireless LNP because the petitioners claim that Congress never delegated authority to the FCC.

The CPUC supports wireless number portability because it is likely to increase competition in the wireless industry, as well as between the wireline and wireless industries. Furthermore, consumers have expressed a desire to be able to switch wireless phone providers without surrendering their phone number. This will force wireless providers to offer lower prices and better packages to keep existing or to attract new customers.

4.5 California Telecommunications Consumer Bill of Rights – A Stronger Role for the CPUC in Consumer Protection

On June 6, 2002, the Commission released its draft interim decision and draft general order in Rulemaking R.00-02-004 to propose rules governing telecommunications consumer protection. The key components of the draft documents were that they:

1. Established seven basic rights afforded to consumers (disclosure, choice, privacy, participation and enforcement, accurate bills and redress, non-discrimination, and safety).
2. Established a comprehensive set of consumer protection rules to enforce the rights listed above.
3. Applied to all telecommunications carriers.
4. Provided protection to residence and small business customers, and
5. Reduced the current carrier limitation of liability.

In July 2003 the Commission issued a new draft decision and General Order. To prepare for the possibility that that these drafts would lead to a final CPUC decision by October 2003, the Commission held Consumer Bill of Rights Compliance Workshops for all telecommunications carriers in August 2003.

[40] First Report and Order in the Matter of Telephone Number Portability, CC Docket No. 95-116, FCC 96-286, Paragraph 4. Memorandum Opinion and Order, CC Docket No. 95-116, FCC 02-215, Paragraph 1.

4.6 CPUC Opens Docket to Address Service Quality Standards

In early December 2002, the Commission opened a proceeding to revise the ten-year-old standards it has been using to judge telecommunications service quality. The action was necessitated because of the evolution of telecommunications technology and changed business conditions.

This proceeding will establish rules for all carriers providing retail telecommunications products or services to end users in California, including DSL and wireless providers. It will also establish more uniform procedures for measuring and reporting service quality. Specifically, the proceeding will establish:

- Rules for when automated menus are used to respond to customers' calls and to allow access to a company representative.
- Standards for installation and repair of primary telephone lines, additional telephone lines, DSL lines, and other services.
- Higher standards and enforcement mechanisms such as penalties and customer credits that ensure carriers provide high quality service to Californians.
- Additional technical and consumer impact measures and reports that are needed to adequately measure service quality.
- A requirement for all carriers to report major service outages.
- Reporting requirements that will help the Commission measure the effectiveness of its consumer protection rules.

By the end of May of this year, interested parties had submitted all of their comments on 1) proposed measures for specific services, 2) the costs and benefits associated with the proposed measures, 3) whether there is a reasonable alternative or an interim step needed for establishing standards and service quality assurance mechanisms, and 4) whether holding workshops would be a productive process to undertake after draft rules are issued by the Commission.

Unless a need arises for the Commission to conduct public hearings in this proceeding, a final decision adopting revised rules is expected before the end of 2003.

4.7 Competition Among Inside Wiring Service Providers

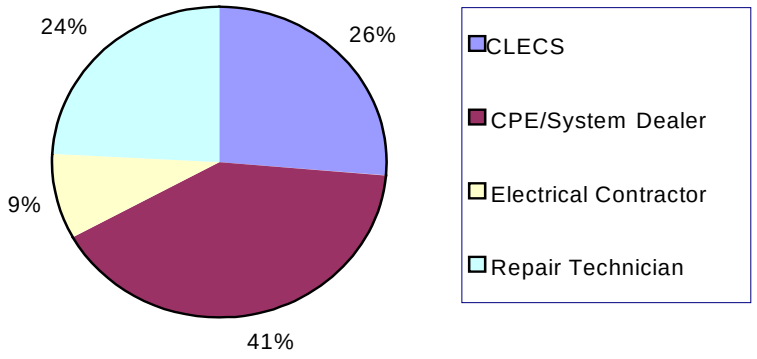
Following the Commission's direction in its D.02-12-062, TD staff examined competition in the residential and business inside wire repair services market. During April and May, 2003 staff mailed questionnaires about competition in this market to 1,200 firms believed to be offering this service. 140 surveys were returned, including 19 from ILECs. 76 returned surveys were from respondents who indicated they were providing inside wire repair service. Most of these respondents were electrical contractors, handyman firms, property maintenance providers, telecommunications dealers and services firms, telecommunications installation and repair firms, and telecommunications wiring and cable firms. Eighteen of these respondents were ILECs and, among them, at least one or more claimed to be providing inside wire repair service within all the geographic areas of the state ultimately covered in the TD staff survey.

All firms surveyed were asked the following questions:

- Do you provide telephone inside wire repair service? To business customers? To residential customers?
- What incumbent local exchange carrier serves the area where your office is located?
- How many service calls did you make for telephone inside wire repair service between January 1, 2002 and December 31, 2002? To business customers? To residential customers?
- Do you believe the prices you charge for telephone inside wire repair service are above or below those of the incumbent local exchange carrier that serves the area where your office is located?
- Please identify the three most serious problems you experience in serving telephone inside wire repair customers.

Data from the mail and telephone survey efforts indicate that about 97% of 2002 inside wire repair service calls were made by ILECs.[41] Other (non-ILEC) firms found to be providing inside wiring repair service fell into four categories: CLECs, CPE/System Dealers, Electrical Contractors, and Repair Technicians.[42]
In terms of service calls made to non-ILEC service providers, CPE/System Dealers had the largest share of this market (41%), while CLECs had a 26% share, Repair Technicians a 24% share and Electrical Contractors a 9% share. (See Figure 4.4.)

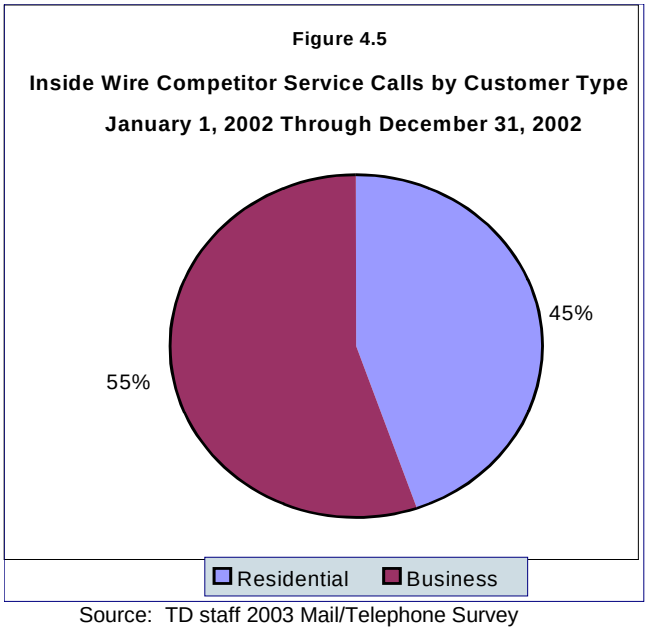
Figure 4.4
Competitor Service Calls by Provider Type
January 1, 2002 Through December 31, 2002



Source: TD staff 2003 Mail/Telephone Survey

It was found that as a group, non-ILEC service providers served business customers somewhat more often than residential customers. (See Figure 4.5.)

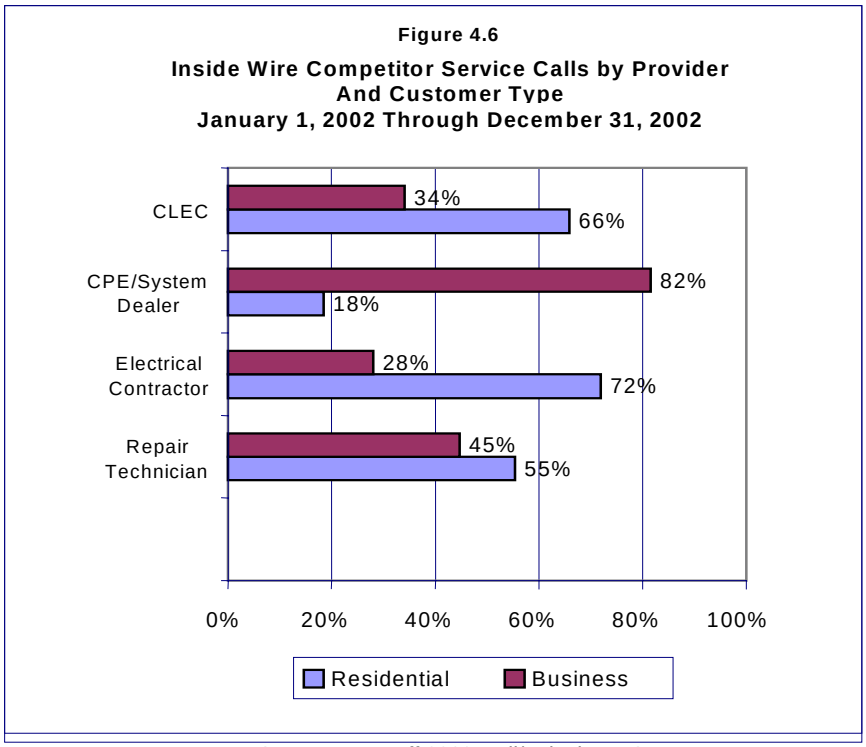
[41] Taken together, the ILECs that responded to the survey do business throughout the entire state. Since the geographic range of the group of non-ILEC respondents was not quite as encompassing, this estimate could be slightly inflated.
[42] The category of "CPE/System Dealers" includes both telecommunications dealers and services firms, and telecommunications installation and repair firms. "Electrical Contractors" are licensed electrical contractors that may also specialize in telecommunications installation and repair. Handyman firms, property maintenance providers, and telecommunications wiring and cable firms make up the "Repair Technicians" category.



Source: TD staff 2003 Mail/Telephone Survey

According to the data, CPE/System Dealers primarily serve business customers, while both Electrical Contractors and CLECs focus more on serving residential customers. Repair

Technicians appear to serve residential and business customers in relatively equal quantities. (See Figure 4.6.)



Source: TD staff 2003 Mail/Telephone Survey

With the exception of the two largest ILECs, the survey showed that ILECs do not compete in each others' territories. Furthermore, the survey found no area that was not served by an ILEC and another class of inside wiring service provider.

Both ILECs and the other repair service providers identified improper installation and repair as one of the top problems they encounter in their work. The problem was the second-ranked concern for ILECs, but it was only the tenth-ranked complaint for other repair service providers.[43]

Non-ILEC repair service providers claimed that ILECs engage in practices to discourage competition by not activating the proper lines, by failing to repair problems in the ILECs' own wiring, and by creating delays for non-ILEC repair technicians who need to obtain information or service from the ILECs.[44]

Finally, the survey revealed that while the TD staff was able to easily identify repair service providers in the yellow pages based on terms such as "inside wire' or "telecommunications" in the course of performing its survey, these are not terms that are familiar to many people. Thus, clear references in the telephone yellow pages for "telephone wiring" or "phone wiring" would make the process of finding repair service providers much easier for consumers.

4.8 New Federal Broadband Loan Program for Rural Areas

In 2002, the U.S. Department of Agriculture (USDA) administered a $100 million federal pilot program designed to provide loans and loan guarantees for rural broadband systems development. The program, Rural Utilities Service (RUS) was particularly unique in that it enabled the USDA to consider fund borrowers serving communities as large as 20,000 inhabitants.[45] On July 3, 2003, the FCC's Wireless Telecommunications Bureau joined the USDA in this effort and launched a joint initiative aimed at deployment of wireless service in rural communities. This collaborative effort could provide rural communities with a better chance of receiving access to broadband technology, possibly through a wireless solution. The CPUC will be following the progress made by this initiative as part of its Broadband Rulemaking (R.03-04-003).

4.9 Federal Proceedings Impacting Competition

Several proceedings before the FCC impact the competitive landscape in California.

4.9.1 Triennial Review of UNE Access Rules

In December of 2001, the FCC initiated a triennial review of its UNE rules to determine if it needs to modify them in connection with what UNEs must be made available to CLECs by ILECs, and in what manner those UNEs should be made available.

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[43] These claims notwithstanding, actual frequency of improper installation and repair was not determined by the survey. Thus, staff cannot conclude that such claims are proof of a quality of service problem.

[44] As in the case of improper installation and repair claims, the survey was not designed to verify allegations of these practices and, thus, they cannot serve as proof that any ILEC anti-competitive behavior is occurring.

[45] In the past, the USDA's definition of a rural community has not exceeded populations of more than 5,000 inhabitants.

In its August 2003 final ruling in this proceeding, the FCC found certain types of switching, loops, and transport UNEs will no longer be unbundled based on a presumptive finding that competitors are not impaired from offering services. It also indicated that it will no longer require voice/DSL line sharing. Under this ruling, states will have a substantial role in applying the FCC's impairment standard, with specific guidelines, to determine the availability of specific UNEs in the marketplace. Based on the FCC's presumptive finding of no impairment, switching for DS1 UNE-P will no longer be unbundled, but states have 90 days to rebut that finding and, under specific criteria, to conduct a proceeding within nine months to determine whether economic and operational impairment exists for mass market switching, loops, and transport UNEs.

The CPUC has initiated a proceeding to address the impairment questions raised by the FCC, and is considering an appeal of the FCC's line sharing ruling.

4.9.2 Review of UNE TELRIC Pricing Rules and Resale Service Pricing Rules

On September 15, 2003 the FCC released a NPRM to (1) review its current UNE and service resale pricing rules, and (2) consider whether these rules result in pricing methodologies conducive to efficient facilities investment. The rulemaking seeks public comment on how the costing of UNEs can be made less hypothetical and, thus, more firmly rooted in the real world attributes of the existing telecommunications network. The FCC's stated objective is to modify these rules in a way that helps state commissions more easily carry out their statutory role of developing UNE prices and resale discounts that are compliant with federal law and consistent among states.

4.9.3 Classification of DSL Service

In 2002, the FCC released a NPRM to consider and rule on (1) how to classify broadband access service to the Internet over domestic wireline facilities (DSL service) for regulatory purposes, and (2) whether facilities-based providers of broadband Internet access services provided over wireline and other platforms (including cable), wireless and satellite should be required to contribute to universal service. Interested parties subsequently filed initial and reply comments on theses issues, and an FCC ruling on the matters is eminent. If the FCC decides to re-classify DSL, California will have to consider whether to file an appeal on the issue.

4.9.4 Classification of Cable Modem Service

In 2002, the FCC issued a ruling that defined cable modem service as an information service subject to FCC jurisdiction. The FCC's action effectively deregulated cable modem service, and California and other states appealed the ruling. On October 6, 2003, the 9th Circuit Court ruled in favor of California and the other states. It found that cable modem service is, in part, a telecommunications service and is subject to common carrier regulation.

4.9.5 AT&T Voice Over Internet Protocol (VoIP) Petition

Some large wireline long distance carriers also own and operate Internet backbone facilities, and are beginning to use these facilities and Internet Protocol (IP) to transport long distance phone-to-phone transmissions that originate and terminate on ILEC local networks. In October of 2002 AT&T filed a Petition for Declaratory Ruling with the FCC alleging that

because IP telephone traffic is carried over the same common Internet backbone facilities that carry Internet traffic, AT&T is entitled to subscribe to local services (the same as Internet Service Providers (ISPs)) rather than be required to pay the terminating end local network access charges ILECs normally assess on conventional long distance calls. AT&T is asking that the FCC issue a declaratory ruling stating that the providers of these VoIP services are entitled to subscribe to local service, and are exempt from interstate access charges.

In February 2003, the CPUC filed comments in response to AT&T's petition arguing that AT&Ts IP telephony traffic constitutes a telecommunications service and should thus be subject to local network access charges. In fact, the use of the VoIP technology in some form to provide voice communication that originates and terminates at a telephone handset by firms that do not believe they are providing a telecommunications service is growing throughout the U.S. The TD staff has recently identified several firms that appear to be using the technology to provide local telephone service in California. In late September, TD informed these firms that they should file an application with the Commission to conduct their services as a telecommunications utility without delay. The CPUC is concerned that if AT&T's VoIP calls and other similar VoIP applications are treated the same as internet traffic, it will set a dangerous precedent that will ultimately result in the demise of universal service funding. A final FCC ruling on the AT&T petition remains pending.

4.9.6 Broadband Power Line (BPL) Systems

On May 23, 2003, The FCC initiated an inquiry regarding the offering of broadband service over electric power line facilities. The inquiry seeks public comment to ascertain if it would be necessary to change FCC rules in order to facilitate the deployment of this technology as an alternative to other broadband infrastructure. BPL could play an important role in the broadband market by introducing additional competition in the market and providing access to rural and underserved areas. The CPUC will file comments addressing specific technical and economic questions contained in the FCC's proposed rules.

4.9.7 Number Portability and Numbering Resource Optimization

On May 28, 2003, the FCC issued an order that will further efforts to require number portability (the ability for customers to take their phone number with them when they opt to receive service from a different service provider). In addition, the order addresses issues that will impact states' ability to conserve numbering resources. The CPUC continues to play an active role in this proceeding and will file comments to address the FCC's proposal relating to number pooling requirements.

4.10 State Regulatory Proceedings Impacting Competition

There are also several proceedings before the Commission that impact the competitive landscape in California.

4.10.1 The Fourth Triennial Review of the New Regulatory Framework (NRF)

The NRF is a form of regulation that is based on a price cap indexing mechanism that was adopted for the four largest California ILECs (SBC, Verizon, Citizens, and Roseville) and relies on profit as the incentive to motivate utility management to run the company in an

economically rational manner. The NRF was designed using ILEC rate caps, indexed and modified annually for changes (generally increases) in inflation and for changes (generally inflation offsetting gains) in productivity that result from technological innovation. Customers share in ILEC profits that exceed a specified threshold.

The Commission reviews the NRF every three years to assess its ongoing effectiveness. It commenced its fourth such triennial review for SBC's and Verizon's operations under the NRF in September 2001. The review has involved operational audits of both companies. Because the NRF incentive mechanism to cut costs can jeopardize the quality of service provided to customers, it has also involved a process to assure that both companies are appropriately balancing the pursuit of reduced costs with the maintenance of good service. In SBC's case, the audit process raised questions about 1) whether it is mis-accounting for some monies in the areas of pensions, PBOPs, income taxes and depreciation accounting, and 2) the appropriateness of some affiliate transactions. The Commission held hearings on these issues in June of 2002, and a decision resolving them is pending.

Hearings on the two companies' service quality under the NRF were held in August 2002, and differing draft decisions of service quality findings were subsequently issued in March 2003, June 2003 and August 2003. The Commission is expected to vote on these alternates during the last quarter of 2003. Additionally in August 2003, the Commission released different draft decisions on the audit of SBC. Comments on these draft decisions are due in October, and a Commission vote on them may also occur in the last quarter of 2003.

In the latter part of 2003 after a final CPUC decision is distilled from these drafts, the last phase of the triennial review will focus on identifying and implementing any needed remedial operational and service related changes for the companies.

4.10.2 A Commission Plan for Widespread Use of Advanced Communications in California

Last year the Legislature, through passage of Senate Bill 1563, amended the policy goals in the PU Code to include a greater focus on promoting access to advanced telecommunications services for the state's educational institutions, health care facilities, community based organizations and government institutions. The broadened goals also increased the focus on expanding access to state-of-the-art communications technologies for rural, inner city, low income and disabled Californians. The bill specifically directed the Commission to develop a detailed plan to promote these policy goals and submit that plan to the Legislature by the end of 2004.

On April 11, 2003 the Commission took the first step in this process by opening a rulemaking proceeding to identify and explore 1) existing barriers to the ubiquitous availability and use of advanced telecommunications technology, 2) whether new telecommunications technologies or the cost of existing technologies have changed in ways that would make them more economical to deploy statewide, 3) how telecommunications technologies and their cost may change in the future to allow them to be more economical to deploy statewide, 4) whether the Commission should (or could) direct changes in technologies and/or their deployment to promote more ubiquitous availability, 5) how existing programs may promote the availability and use of advanced telecommunications technology for inner city, low-income and disabled Californians, 6) how competitive markets for advanced communications technologies can encourage greater efficiency, low prices and more consumer choice, 7) how identified technologies may promote economic growth, job creation and social benefits, 8) the adequacy of current efforts to provide educational

institutions, health care institutions, community-based organizations, and governmental institutions with access to advanced telecommunications services, and 9) whether existing law and policy encourage fair treatment of consumers through the promotion of informed choices, the establishment of reasonable service quality standards, and the establishment of processes for equitable resolution of billing and service problems.

The Commission has received the comments of interested parties in this rulemaking, and is working toward its legislative deadline.

4.10.3 Legislation

The following telecommunications bills were signed into law this year:

For Wireless Carriers

- AB 855, which requires the Department of General Services to compile a list of available state-owned property that can be leased to wireless telecommunication providers for the location of their facilities. This bill also requires that 15 percent of the revenues from these leases be deposited into a newly created Digital Divide Account within the California Teleconnect Fund to be administered by the CPUC to fund a grant program aimed at narrowing the digital divide.

- AB 1379, which requires commercial mobile radio service carriers to provide customers with a way to access their current account information. The bill also requires the carrier to determine what account information is provided to the customer, but that would have to include information concerning the customer's roaming charges.

Regarding Consumer Protection/Disclosure

- AB 909, which requires incumbent local exchange carriers and competitive local exchange carriers to separate customer's local and long-distance service charges on their monthly bills when these services are purchased in the same package. The bill also calls on carriers to provide customers with total monthly minutes of use upon request and without charge until January 1, 2007.

Concerning Telephone Solicitations

- SB 33, which adopts the Federal Trade Commissions "do not call" list that contains the telephone numbers and ZIP codes of residential or wireless telephone subscribers who do not wish to receive unsolicited and unwanted telephone calls from telephone solicitors.

Regarding Public Safety Communications

- SB 666, which requires the Department of General Services (DGS) to report to the Legislature by July 1,2004, regarding the status of implementing wireless 911 services. The bill also requires DGS to convene a working group to make recommendations to the Legislature for a state privacy policy related to customer location information of cell phone users.

Concerning Public Purpose Programs

- SB 720, which authorizes the Commission to reallocate specified unclaimed California Teleconnect Administrative Fund funds to make one-time expenditures of up to $3 million for up to 40% of installation costs for schools, libraries, community-based organizations and government owned health clinics and hospitals to have access to advanced telecommunications services. The bill also codifies the Commission's recent action adding DSL service to the California Teleconnect Fund program.

The following telecommunications bills remain under consideration by the Legislature in its 2003 - 2004 session:

For Wireless Carriers

- AB 451, which would require cellular service providers to include in each customer's bill a detailed table containing specific information outlining the customer's plan for that specific month.

- SB 128, which would require cellular radio telephone service providers to establish a grace period of unspecified duration for new customers from the date the phone was purchased, allowing them to cancel service, but requiring that a customer be responsible for services used prior to the cancellation of the agreement. The bill would exempt specified "commercial accounts" and contracts for less than one month's service.

For the Telecommunications Infrastructure

- AB 1164, which would require all mobile telephony services providers - a broader definition than cellular carriers - to report to the CPUC on customer fraud activities.

- SB 834, which would require the CPUC to convene a proceeding to consider how to encourage more competition with regard to high-speed communication services. The bill would also require the CPUC to submit a report to the Legislature of its findings by July 1, 2004.

Regarding Consumer Protection/Disclosure

- AB 1329, which would provide telecommunication customers with the rights of disclosure, choice, privacy, public participation and enforcement, accurate bills and adequate remedies when bills are not accurate, freedom from discrimination and safety and security of their person and property.

Concerning Telephone Solicitations

- AB 1078, which would require a person soliciting a newspaper or magazine subscription renewal by telephone to notify the consumer of the termination date of that subscription. The bill would also allow a person 65 years of age or older who enters into a contract with a financial institution to rescind the contract after 60 days.

- AB 1452, which would require that the error rate for predictive dialers, established by the CPUC, not exceed one percent.

Regarding Public Safety Communications

- AB 914, which would update the 911 emergency response system by incorporating new technologies and by providing access to operators that speak languages other than English.

- SB 419, which would authorize the CPUC, in consultation with the Advisory Committee on the California Law Enforcement Telecommunications System and the Public Safety Radio Strategic Planning Committee, to update wireless telecommunications systems used by state and local law enforcement agencies.

Concerning Public Purpose Programs

- AB 1292, which would continuously appropriate telecommunications public program funds, eliminating the requirement that they be appropriated by the Legislature each fiscal year.

- AB 1457, which would appropriate $2.5 million to the CPUC to repay prior High Cost A fund claims

- SB 830, which would require any person or corporation offering telephone service to provide call identification services to any elementary or secondary public schools without charge.

4.10.4 Competition Report

The Legislature enacted PU Code Section 316.5, which directed the CPUC to issue an annual telecommunications competition report on or before October 31. This statute sunsets on January 1, 2004. This is the third and final competition report the CPUC has issued in compliance with this statute.